11.6 Greenhouse Gas Emissions Assessment/LB CAP Checklist

Greenhouse Gas Emissions Assessment
First Citizens Bank – Long Beach Project
Long Beach, California

Kimley»Horn

Expect More. Experience Better.

Prepared by:

Kimley-Horn and Associates, Inc.
660 South Figueroa Street, Suite 2050
Los Angeles, California 90017
Contact: Heidi Rous
213.394.0379

May 2024

TABLE OF CONTENTS

LIST OF ABBREVIATED TERMS

AB	Assembly Bill
CARB	California Air Resource Board
CCR	California Code of Regulations
CalEEMod	California Emissions Estimator Model
CEQA	California Environmental Quality Act
CALGreen Code	California Green Building Standards Code
CPUC	California Public Utilities Commission
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
CFC	Chlorofluorocarbon
CPP	Clean Power Plan
FCAA	Federal Clean Air Act
GHG	Greenhouse gas
HCFC	Hydrochlorofluorocarbon
HFC	Hydrofluorocarbon
LCFS	Low Carbon Fuel Standard
CH_4	Methane
$MMTCO_2e$	Million metric tons of carbon dioxide equivalent
$MTCO_2e$	Metric tons of carbon dioxide equivalent
NHTSA	National Highway Traffic Safety Administration
NF_3	Nitrogen trifluoride
N_2O	Nitrous oxide
PFC	Perfluorocarbon
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SB	Senate Bill
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SCAG	Southern California Association of Government
Sf	Square foot
SF_6	Sulfur hexafluoride
TAC	Toxic air contaminants
U.S. EPA	U.S. Environmental Protection Agency

1 INTRODUCTION

This report documents the results of a Greenhouse Gas (GHG) Emissions Assessment completed for the First Citizens Bank Trust (First Citizens Bank) ("Applicant")– Long Beach Project ("Project" or "proposed Project"). The purpose of this GHG Emissions Assessment is to evaluate the potential construction and operational emissions associated with the Project and determine the level of impact the Project would have on the environment.

1.1 Project Location and Setting

The proposed Project site is in the county of Los Angeles (County) in the city of Long Beach (City), approximately 20 miles south of downtown Los Angeles; see **Exhibit 1: Regional Vicinity Map**. The approximately 36,775 SF (0.87 acre) proposed Project site consists of three parcels (APN: 7145-006-010, -011, 012) located at 3450-3470 Long Beach Boulevard. Regional access to the proposed Project site is provided via Interstate Highway 405 (I-405), that runs west and south of the proposed Project site. Local access to the proposed Project site is provided via Long Beach Boulevard and Wardlow Road.

As shown on **Exhibit 2: Project Vicinity Map**, the proposed Project site is vacant and highly disturbed. The proposed Project site was previously used for oil drilling and three decommissioned and plugged oil wells are located on the eastern, western, and southern portions of the site. A fourth decommissioned oil well is located on the southeastern periphery of the site. The proposed Project site is largely devoid of vegetation, excluding a narrow band of vegetation featuring patches of grass and four palm trees bordering Long Beach Boulevard, a cluster of two palm trees located in the northeast corner of the proposed Project site, and a single palm tree located on the eastern side of the proposed Project site, towards the southeast corner. Several large branches of a ficus tree planted on an adjacent property overhang the proposed Project site in the northeast corner of the site.

1.2 Project Description

The proposed Project is depicted on **Exhibit 3: Conceptual Site Plan**. As shown, the Applicant proposes to develop an approximately 12,469 GSF, two-story office/bank building on three parcels (APN: 7145-006-010, -011, -012). A lot merger is proposed as part of the Project to combine the three parcels into one. The building would have a FAR of 0.34. The net occupiable building space is 7,821 SF. The proposed building height would be 34 feet and would not exceed two stories, with the exception of a 51-foot tower.[1] The proposed building would be situated in the northeast corner of the proposed Project site with parking areas provided to the west and south of the building. A total of 44 vehicular parking stalls are proposed. Eight of the proposed parking stalls would accommodate electric vehicles, providing access to an electric vehicle charging station. Vehicular access to the proposed Project site would be provided via a single driveway from Long Beach Boulevard. A marked pedestrian walkway would connect the sidewalk along Long Beach Boulevard with the front of the proposed building. The proposed Project would include a walk-up Automated Teller Machine (ATM); however, the proposed Project would not include a drive-thru teller or drive-thru ATM facility.

The proposed Project would include grading and minimal amounts of excavation necessary for installation of utilities to the proposed building. The proposed land use is typically a permitted use by right in the CCA

[1] LBMC zoning regulations (§ 21.15.1330) define the height of a building with a sloped roof as "the vertical distance above grade to the midpoint height of the highest sloped roof." For the proposed building, this distance amounts to 34 feet, although the peak of the building (the roof ridge) is 42 feet above grade and the tower is 51 feet above grade.

Zoning District. However, because of Project-related excavation, the proposed Project's location in the City's methane zone, and the presence of decommissioned and plugged oil wells on the Project site, the proposed Project is subject to the City's methane gas mitigation ordinance, which states that methane gas mitigation is required for all newly constructed buildings to be located "...less than or equal to three hundred (300) feet from any active, or one hundred (100) feet of an idle and/or abandoned oil/gas well."[2]

To comply with Section 18.78.080 and Chapter 18.79 of the LBMC, the Applicant is proposing to install a Vapor Intrusion Mitigation System (VIMS) to limit potential vapor intrusion impacts and to develop a site-specific Soil Management Plan to excavate and treat contaminated soils during construction. A waiver from LBE Abandonment Standards for the two unverified wells described in Section 2.2.1 has not been granted by the City as of the date of this Initial Study. However, if approved, project design features and/or mitigation measures determined to be acceptable by the City will be included as part of the Project and described in an EIR.

Architectural Design

The proposed building would be located toward the northeastern corner of the proposed Project site, with parking areas situated to the west and south. The building would feature two stories, approximately 15-feet each, and an approximately 16-foot hipped roof. The main building height would be approximately 34 feet in height, and 42 feet above grade. An approximately 51-foot tower, featuring a square bell roof topped with a finial, would be incorporated in the center front of the building. The roof would be copper clad, featuring copper rain gutters and downspouts, underlaid by dark wood corbels. The building exterior would be treated with a white exterior insultation finish system (stucco). The first floor of the building would feature an arcade along the front of the building. An array of photovoltaic (PV) solar panels would be mounted on the roof at the rear of the building and channelized signage identifying the bank would be mounted on the front tower. An eight-foot, stucco-covered perimeter wall would be constructed along the northern, eastern, and southern edges of the property. The western side fronting Long Beach Boulevard, would remain open to the street. The proposed building would be architecturally distinct, in terms of scale and color, but would be of similar size and height as surrounding buildings and would contribute to the eclectic architecture of the surrounding area.

Open Spaces and Landscaping

The existing landscaping on the proposed Project site, as described in Section 2.2.1, would be removed and the proposed Project would include landscaping throughout the parking area, around the periphery of the proposed Building, and along the proposed Project site boundaries. The proposed vegetation includes various trees, shrubs, and other ground cover vegetation. The proposed Project's open space/landscaping would represent approximately 20 percent of the proposed Project site. Landscaping for the proposed Project would be consistent with the requirements of the City's Municipal Code (LBMC) Chapter 21.42, *Landscaping Standards*.

Parking and Access

The City's parking regulations, found in LBMC Chapter 21.41, *Off-Street Parking and Loading Requirements,* identify the required number of parking spaces for particular land uses. Banks require a minimum of five parking spaces per 1,000 SF of gross floor area (GFA). The net occupiable building space is 7,821 SF, and it is anticipated a minimum of 39 parking spaces would be required based on the LBMC's

[2] LBMC, Chapter 18.79.

definition of GFA.[3] However, under the most conservative estimates accounting for all 12,469 SF of the proposed building, the LBMC could require up to a minimum of 63 parking spaces.

As previously described, a total of 44 vehicular parking stalls are proposed. Eight of the proposed parking stalls would accommodate electric vehicles, providing access to an electric vehicle charging station. While Zoning Regulations establish a minimum parking standard, new State Legislation such as Assembly Bill 2097 (AB 2097), adopted September 2022, prohibits a public agency from imposing any minimum automobile parking requirement on any residential, commercial, or other development project, that is located within 1/2 mile of public transportation. The Project Site is located within one half-mile of high-quality public transportation. As such, the Project is not required to provide the 63 parking spaces determined by the Zoning Regulation. However, the proposed parking spaces are still subject to development standards of the Zoning Regulations.

Vehicular access to the proposed Project site would be provided via one driveway at Long Beach Boulevard. The driveway would provide access to the on-site parking spaces. Adjacent to the driveway, a marked pedestrian walkway would connect the sidewalk along Long Beach Boulevard with the walk-up ATM at the front of the proposed building.

Utilities and Infrastructure

Electric power would be provided to the proposed Project site by Southern California Edison and supplemented by a PV solar panel array installed on the back side of the proposed building roof. Water and sewer service would be provided by Long Beach Water. The proposed Project would not use natural gas; however natural gas service in the area is provided by the City of Long Beach Utility Services. Trash and recycling collection would be provided by City of Long Beach Utility Services.

[3] Per LBMC Chapter 21.41 (§ 21.41.216), Gross Floor Area (GFA) excludes utility and elevator cores, stairwells and restrooms.

This page intentionally left blank.

Exhibit 1: Regional Vicinity Map

FIRST CITIZENS BANK & TRUST - LONG BEACH PROJECT

Kimley»Horn

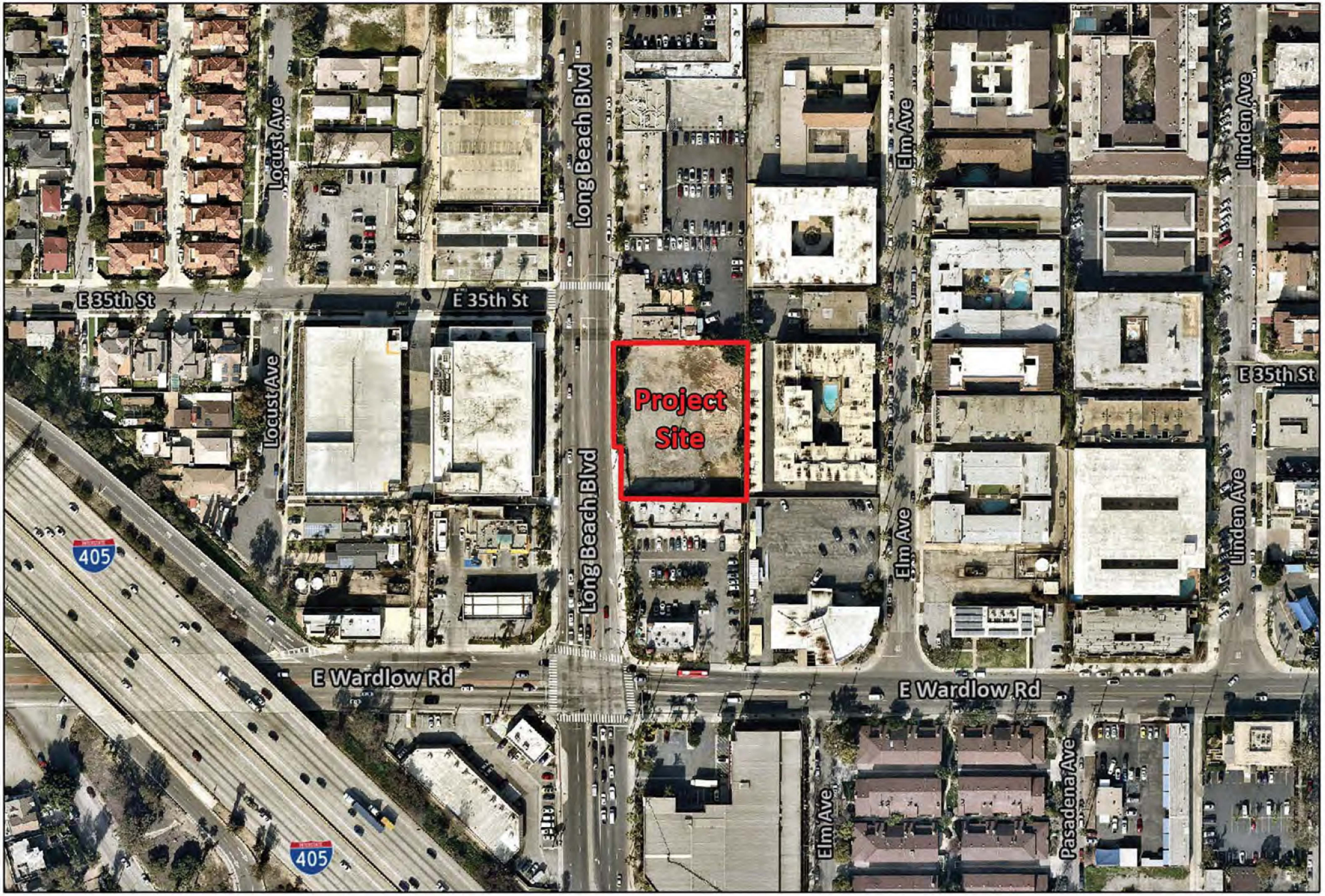
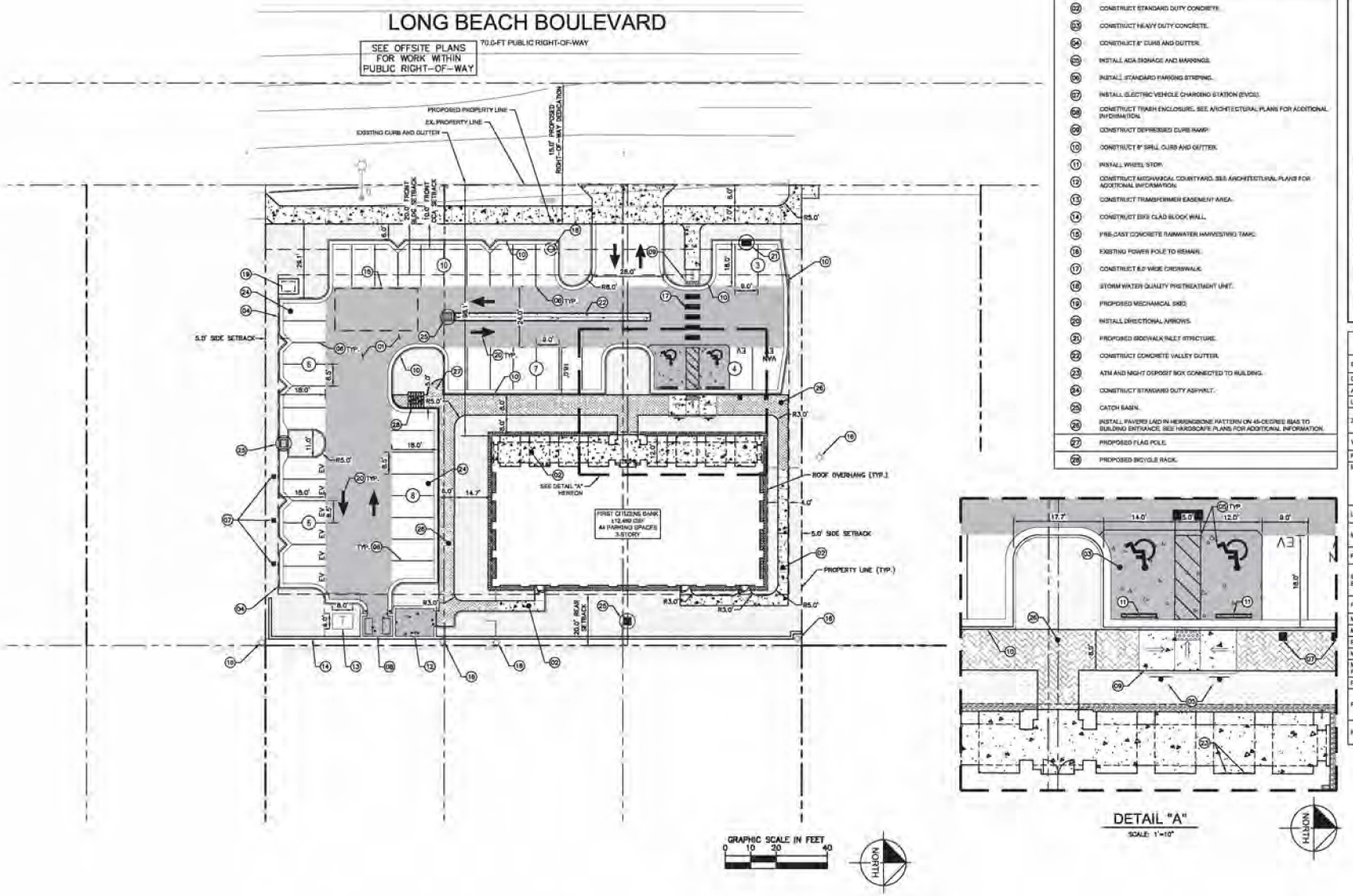


Exhibit 2: Project Vicinity Map

FIRST CITIZENS BANK & TRUST - LONG BEACH PROJECT

Kimley»Horn



SITE CONSTRUCTION NOTES

01	CONSTRUCT HEAVY DUTY ASPHALT.
02	CONSTRUCT STANDARD DUTY CONCRETE.
03	CONSTRUCT HEAVY DUTY CONCRETE.
04	CONSTRUCT 6" CURB AND GUTTER.
05	INSTALL ADA SIGNAGE AND MARKINGS.
06	INSTALL STANDARD PARKING STRIPING.
07	INSTALL ELECTRIC VEHICLE CHARGING STATION (EVCS).
08	CONSTRUCT TRASH ENCLOSURE. SEE ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
09	CONSTRUCT DEPRESSED CURB RAMP.
10	CONSTRUCT 6" SPILL CURB AND GUTTER.
11	INSTALL WHEEL STOP.
12	CONSTRUCT MECHANICAL COURTYARD. SEE ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
13	CONSTRUCT TRANSFORMER EASEMENT AREA.
14	CONSTRUCT 8'#3 CLAD BLOCK WALL.
15	PRE-CAST CONCRETE RAINWATER HARVESTING TANK.
16	EXISTING POWER POLE TO REMAIN.
17	CONSTRUCT 6.0' WIDE CROSSWALK.
18	STORM WATER QUALITY PRETREATMENT UNIT.
19	PROPOSED MECHANICAL SHED.
20	INSTALL DIRECTIONAL ARROWS.
21	PROPOSED SIDEWALK/RAILT STRUCTURE.
22	CONSTRUCT CONCRETE VALLEY GUTTER.
23	ATM AND NIGHT DEPOSIT BOX CONNECTED TO BUILDING.
24	CONSTRUCT STANDARD DUTY ASPHALT.
25	CATCH BASIN.
25	INSTALL PAVERS LAID IN HERRINGBONE PATTERN ON 45-DEGREE BIAS TO BUILDING ENTRANCE. SEE HARDSCAPE PLANS FOR ADDITIONAL INFORMATION.
27	PROPOSED FLAG POLE.
28	PROPOSED BICYCLE RACK.

SITE LEGEND

- PROPERTY LINE
- SETBACK LINE
- STANDARD CURB AND GUTTER
- SPILL CURB AND GUTTER
- (8) PARKING SPACE COUNT
- SIGN (SEE PLAN)
- WHEEL STOP
- ACCESSIBLE PARKING MARKING (V INDICATES VAN ACCESSIBLE)
- DIRECTIONAL PAVEMENT ARROWS
- DEPRESSED CURB RAMP
- STANDARD DUTY ASPHALT
- HEAVY DUTY ASPHALT
- STANDARD DUTY CONCRETE
- HEAVY DUTY CONCRETE
- PAVERS - SEE HARDSCAPE PLAN FOR ADDITIONAL INFORMATION
- LANDSCAPE PER LANDSCAPE PLANS

SITE DATA TABLE

SITE ADDRESS:	3450 LONG BEACH BOULEVARD, LONG BEACH, CALIFORNIA, 90807
COORDINATES:	33.8194° N, 118.1888° W
APN #:	7140-008-010, -011, & -012
LOT AREA:	0.86 AC.
ZONING:	COMMUNITY COMMERCIAL AUTOMOBILE ORIENTED (CCA) AND WITHIN HIGH-RISE OVERLAY DISTRICT (HR-4).
WATERSHED:	COMPTON CREEK-LOS ANGELES RIVER WATERSHED
FLOOD PLAIN:	ZONE X
BUILDING SETBACKS:	FRONT: 10-FT (CCA); 10-FT (HR-4 IF BUILDING UNDER 45-FT); 20' (HR-4 IF BUILDING OVER 45-FT); REAR AND SIDE: 5-FT IF ADJACENT TO NON-RESIDENTIAL & 20-FT IF ADJACENT TO REAR YARD OF RESIDENTIAL DISTRICT (CCA)
LANDSCAPE BUFFER:	REQUIRED ON ALL 4 SIDES IF BUILDING HEIGHT OVER 45-FT
MAX. IMPERVIOUS:	NO MORE THAN 90% OF ON-SITE AREA NOT COVERED BY STRUCTURES, DRIVEWAYS, AND APPROVED PARKING.
PROP. IMPERVIOUS:	28,819 SF (0.66 AC.) 0.66 / 0.86 = 77% IMPERVIOUS
SIDEWALK AND ENCLOSURE AREA:	SIDEWALK: 2,800 SF ENCLOSURES: 275 SF TOTAL IMPERVIOUS NOT STRUCTURES/DRIVEWAY/PARKING: 15,730 SF
PROP. PERVIOUS:	8,611 SF 0.2 / 0.86 = 23% < 30%
MAX. F.A.R.	NO F.A.R. REQUIREMENT PER CCA ZONING
MAX. BUILDING HEIGHT:	2 STORIES, 28-FT (CCA); 4 STORIES (HR-4)
PROP. BUILDING HEIGHT:	41'-8"
MIN. LOT SIZE:	10,000 SF
MAX. BUILDING SIZE PER PARKING REQUIREMENT:	12,469 SF GROSS FLOOR AREA (GFA)
PROP. BUILDING SIZE:	7,907 SF
PARKING REQUIRED:	5 SPACES PER 1,000 GFA 12,469 SF / 1,000 SF = 12.5 12.5 * 5 SPACES = 63 SPACES REQUIRED 7 EV SPACES REQ., 2 EVCS REQ.
PARKING PROVIDED:	2 ADA SPACES, 8 EV SPACES, 34 STANDARD SPACES TOTAL: 44 SPACES

BUILDING DATA:
9,500 SF ALLOWABLE > 7,907 SF PROVIDED
3,347 SF (1ST OCC)
4,560 SF (2ND OCC)

SPRINKLED
(1,251 SF EXTERIOR ARCADE)
6,181 GSF FOOTPRINT (191 FT/8)
5,302 GSF (2ND) FLR PERIMETER
12,469 GROSS BUILDING SF

DETAIL "A"
SCALE: 1"=10'

SOURCE: Conceptual Site Plan Preliminary Layout dated April 12, 2023

Exhibit 3: Conceptual Site Plan

FIRST CITIZENS BANK - LONG BEACH PROJECT

Kimley»Horn

This page intentionally left blank.

2 ENVIRONMENTAL SETTING

2.1 Greenhouse Gases and Climate Change

Certain gases in the earth's atmosphere classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

The primary GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Examples of fluorinated gases include chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3); however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of GHGs exceeding natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the Earth's climate, known as global climate change or global warming.

GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants (TACs), which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of a GHG molecule is dependent on multiple variables and cannot be pinpointed, more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms of carbon sequestration. Of the total annual human-caused CO_2 emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO_2 emissions remains stored in the atmosphere.[4] **Table 1: Description of Greenhouse Gases** describes the primary GHGs attributed to global climate change, including their physical properties.

[4] Intergovernmental Panel on Climate Change, *Carbon and Other Biogeochemical Cycles. In: Climate Change 2013: The Physical Science Basis, Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, 2013. http://www.climatechange2013.org/ images/report/WG1AR5_ALL_FINAL.pdf.

Table 1: Description of Greenhouse Gases

Greenhouse Gas	Description
Carbon Dioxide (CO_2)	CO_2 is a colorless, odorless gas that is emitted naturally and through human activities. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood. The largest source of CO_2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, and industrial facilities. The atmospheric lifetime of CO_2 is variable because it is readily exchanged in the atmosphere. CO_2 is the most widely emitted GHG and is the reference gas (Global Warming Potential of 1) for determining Global Warming Potentials for other GHGs.
Nitrous Oxide (N_2O)	N_2O is largely attributable to agricultural practices and soil management. Primary human-related sources of N_2O include agricultural soil management, sewage treatment, combustion of fossil fuels, and adipic and nitric acid production. N_2O is produced from biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 120 years. The Global Warming Potential of N_2O is 298.
Methane (CH_4)	CH_4, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. Methane is the major component of natural gas, about 87 percent by volume. Human-related sources include fossil fuel production, animal husbandry, rice cultivation, biomass burning, and waste management. Natural sources of CH_4 include wetlands, gas hydrates, termites, oceans, freshwater bodies, non-wetland soils, and wildfires. The atmospheric lifetime of CH_4 is about 12 years and the Global Warming Potential is 25.
Hydrofluorocarbons (HFCs)	HFCs are typically used as refrigerants for both stationary refrigeration and mobile air conditioning. The use of HFCs for cooling and foam blowing is increasing, as the continued phase out of CFCs and HCFCs gains momentum. The 100-year Global Warming Potential of HFCs range from 124 for HFC-152 to 14,800 for HFC-23.
Perfluorocarbons (PFCs)	PFCs have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Global Warming Potentials range from 6,500 to 9,200.
Chlorofluorocarbons (CFCs)	CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. The Montreal Protocol on Substances that Deplete the Ozone Layer prohibited their production in 1987. Global Warming Potentials for CFCs range from 3,800 to 14,400.
Sulfur Hexafluoride (SF_6)	SF_6 is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas. The Global Warming Potential of SF_6 is 23,900.
Hydrochlorofluorocarbons (HCFCs)	HCFCs are solvents, similar in use and chemical composition to CFCs. The main uses of HCFCs are for refrigerant products and air conditioning systems. As part of the Montreal Protocol, HCFCs are subject to a consumption cap and gradual phase out. The United States is scheduled to achieve a 100 percent reduction to the cap by 2030. The 100-year Global Warming Potentials of HCFCs range from 90 for HCFC-123 to 1,800 for HCFC-142b.
Nitrogen Trifluoride (NF_3)	NF_3 was added to Health and Safety Code section 38505(g)(7) as a GHG of concern. This gas is used in electronics manufacture for semiconductors and liquid crystal displays. It has a high global warming potential of 17,200.

Source: Compiled from U.S. EPA, *Overview of Greenhouse Gases*, April 11, 2018 (https://www.epa.gov/ghgemissions/overview-greenhouse-gases); U.S. EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016*, 2018; Intergovernmental Panel on Climate Change, *Climate Change 2007: The Physical Science Basis*, 2007; National Research Council, Advancing the Science of Climate Change, 2010; U.S. EPA, *Methane and Nitrous Oxide Emission from Natural Sources*, April 2010.

3 REGULATORY SETTING

3.1 Federal

To date, national standards have not been established for nationwide GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level. Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which would aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

U.S. Environmental Protection Agency Endangerment Finding

The U.S. Environmental Protection Agency (U.S. EPA) authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Federal Clean Air Act (FCAA) and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing FCAA and the U.S. EPA's assessment of the scientific evidence that form the basis for the U.S. EPA's regulatory actions.

Federal Vehicle Standards

In response to the U.S. Supreme Court ruling discussed above, Executive Order 13432 was issued in 2007 directing the U.S. EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the NHTSA issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011, and in 2010, the U.S. EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, an Executive Memorandum was issued directing the Department of Transportation, Department of Energy, U.S. EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the U.S. EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–

2025 light-duty vehicles. The proposed standards projected to achieve 163 grams per mile of CO2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021, and NHTSA intends to set standards for model years 2022–2025 in a future rulemaking. On January 12, 2017, the U.S. EPA finalized its decision to maintain the current GHG emissions standards for model years 2022–2025 cars and light trucks. It should be noted that the U.S. EPA is currently proposing to freeze the vehicle fuel efficiency standards at their planned 2020 level (37 mpg), canceling any future strengthening (currently 54.5 mpg by 2026).

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the U.S. EPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the U.S. EPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by 6 to 23 percent over the 2010 baselines.

In August 2016, the U.S. EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program applies to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards lower CO2 emissions by approximately 1.1 billion metric tons and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program.5

On September 27, 2019, the U.S. EPA and the NHTSA published the "Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program." (84 Fed. Reg. 51,310 (Sept. 27, 2019.)6 The SAFE Rule (Part One) revoked California's authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. On March 31, 2020, the U.S. EPA and NHTSA finalized rulemaking for SAFE Part Two sets CO2 emissions standards and corporate average fuel economy (CAFE) standards for passenger vehicles and light duty trucks, covering model years 2021-2026. The current U.S. EPA administration repealed SAFE Rule Part One, effective January 28, 2022, and is reconsidering Part Two.

In December 2021, the U.S. EPA finalized federal GHG emissions standards for passenger cars and light trucks for Model Years 2023 through 2026. These standards are the strongest vehicle emissions standards ever established for the light-duty vehicle sector and are based on sound science and grounded in a rigorous assessment of current and future technologies. The updated standards will result in avoiding more than three billion tons of GHG emissions through 2050.[7]

Presidential Executive Orders 13990 and 14008

On January 20, 2021, President Biden issued Executive Order 13990, "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis". Executive Order 13990 directs Federal

---

5 U.S. EPA and NHTSA, *Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium and Heavy-Duty Engines and Vehicles – Phase 2,* 2016. Available at: https://www.gpo.gov/fdsys/pkg/FR-2016-10-25/pdf/2016-21203.pdf. Accessed: February 2023.

6 U.S. EPA and NHTSA, Federal Register, Vol. 84, No. 188, *The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program*, September 27, 2019. Available at: https://www.govinfo.gov/content/pkg/FR-2019-09-27/pdf/2019-20672.pdf. Accessed: February 2023.

7 U.S. EPA, *Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026,* 2021. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions. Accessed: February 2023.

agencies to immediately review and take action to address the promulgation of Federal regulations and other actions that conflict with these important national objectives and to immediately commence work to confront the climate crisis. Executive Order 13990 directs the Council on Environmental Quality (CEQ) to review CEQ's 2020 regulations implementing the procedural requirements of the National Environmental Policy Act (NEPA) and identify necessary changes or actions to meet the objectives of Executive Order 13990.

Executive Order 13390 also directs the U.S. EPA to consider whether to propose suspending, revising, or rescinding the standards previously revised under the "The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks," promulgated in April 2020.

On January 27, 2021, President Biden signed Executive Order 14008, "Tackling the Climate Crisis at Home and Abroad," to declare the Administration's policy to move quickly to build resilience, both at home and abroad, against the impacts of climate change that are already manifest and will continue to intensify according to current trajectories. In line with these Executive Order directives, CEQ is reviewing the 2020 NEPA regulations and plans to publish a notice of proposed rulemaking (NPRM) to identify necessary revisions in order to comply with the law; meet the environmental, climate change, and environmental justice objectives of Executive Orders 13990 and 14008; ensure full and fair public involvement in the NEPA process; provide regulatory certainty to stakeholders; and promote better decision making consistent with NEPA's statutory requirements. This phase 1 rulemaking will propose a narrow set of changes to the 2020 NEPA regulations to address these goals.

3.2 State of California

California Air Resources Board

The California Air Resources Board (CARB) is responsible for the coordination and oversight of State and local air pollution control programs in California. Various statewide and local initiatives to reduce California's contribution to GHG emissions have raised awareness about climate change and its potential for severe long-term adverse environmental, social, and economic effects. California is a significant emitter of CO_2 equivalents (CO_2e) in the world and produced 459 million gross metric tons of CO_2e in 2013. In the State, the transportation sector is the largest emitter of GHGs, followed by industrial operations such as manufacturing and oil and gas extraction.

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation, such as the landmark Assembly Bill (AB) 32, *California Global Warming Solutions Act of 2006*, was specifically enacted to address GHG emissions. Other legislation, such as Title 24 building efficiency standards and Title 20 appliance energy standards, were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

AB 32 instructs the CARB to develop and enforce regulations for the reporting and verification of Statewide GHG emissions. AB 32 also directed CARB to set a GHG emissions limit based on 1990 levels, to be achieved by 2020. It set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner.

2022 CARB Scoping Plan

Adopted December 15, 2022, CARB's *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan) sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279. To achieve the targets of AB 1279, the 2022 Scoping Plan relies on existing and emerging fossil fuel alternatives and clean technologies, as well as carbon capture and storage. Specifically, the 2022 Scoping Plan focuses on zero-emission transportation; phasing out use of fossil gas use for heating homes and buildings; reducing chemical and refrigerants with high GWP; providing communities with sustainable options for walking, biking, and public transit; displacement of fossil-fuel fired electrical generation through use of renewable energy alternatives (e.g., solar arrays and wind turbines); and scaling up new options such as green hydrogen. The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (i.e., Climate Action Plan) consistent with CEQA Guidelines Section 15183.5.

The key elements of the 2022 CARB Scoping Plan focus on transportation. Specifically, the 2022 Scoping Plan aims to rapidly move towards zero-emission transportation (i.e., electrifying cars, buses, trains, and trucks), which constitutes California's single largest source of GHGs. The regulations that impact the transportation sector are adopted and enforced by CARB on vehicle manufacturers and are outside the jurisdiction and control of local governments. The 2022 Scoping Plan accelerates development of new regulations as well as amendments to strengthen regulations and programs already in place.

Included in the 2022 Scoping Plan is a set of Local Actions (2022 Scoping Plan Appendix D) aimed at providing local jurisdictions with tools to reduce GHGs and assist the State in meeting the ambitious targets set forth in the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the State's Climate Goals in CEQA GHG analyses. In this section, CARB identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, this section is focused on Residential and Mixed-Use Projects.[8] CARB specifically states that Appendix D does not address other land uses (e.g., industrial).[9] However, CARB plans to explore new approaches for other land use types in the future.[10]

As such, it would be inappropriate to apply the requirements contained in Appendix D of the 2022 Scoping Plan to any land use types other than residential or mixed-use residential development.

Senate Bill 32 (California Global Warming Solutions Act of 2006: Emissions Limit)

Signed into law in September 2016, SB 32 codifies the 2030 GHG reduction target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

[8] California Air Resources Board, *2022 Scoping Plan for Achieving Carbon Neutrality, Appendix D: Local Actions*, Page 21, November 2022.
[9] Ibid, Page 4.
[10] ibid, Page 21.

SB 375 (The Sustainable Communities and Climate Protection Act of 2008)

Signed into law on September 30, 2008, SB 375 provides a process to coordinate land use planning, regional transportation plans, and funding priorities to help California meet the GHG reduction goals established by AB 32. SB 375 requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, aligns planning for transportation and housing, and creates specified incentives for the implementation of the strategies.

AB 1493 (Pavley Regulations and Fuel Efficiency Standards)

AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the U.S. EPA's denial of an implementation waiver. The U.S. EPA subsequently granted the requested waiver in 2009, which was upheld by the by the U.S. District Court for the District of Columbia in 2011. The regulations establish one set of emission standards for model years 2009–2016 and a second set of emissions standards for model years 2017 to 2025. By 2025, when all rules will be fully implemented, new automobiles will emit 34 percent fewer CO_2e emissions and 75 percent fewer smog-forming emissions. In 2019, the U.S. EPA published the SAFE Rule that revoked California's waiver. However, the U.S. EPA is currently reconsidering the SAFE rule pursuant to Presidential Executive Order 13390.

SB 1368 (Emission Performance Standards)

SB 1368 is the companion bill of AB 32, which directs the California Public Utilities Commission (CPUC) to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 limits carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. The new law effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. The CPUC adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload generation owned by, or under long-term contract to publicly owned utilities, for 1,100 pounds of CO_2 per megawatt-hour.

SB 1078, SB 107, and SBX1-2 (Renewable Electricity Standards)

SB 1078 requires California to generate 20 percent of its electricity from renewable energy by 2017. SB 1078 (2006) changed the due date to 2010 instead of 2017. On November 17, 2008, the Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Executive Order S-21-09 also directed CARB to adopt a regulation by July 31, 2010, requiring the State's load serving entities to meet a 33 percent renewable energy target by 2020. CARB approved the Renewable Electricity Standard on September 23, 2010, by Resolution 10-23. SBX1-2, which codified the 33 percent by 2020 goal.

SB 350 (Clean Energy and Pollution Reduction Act of 2015)

Signed into law on October 7, 2015, SB 350 implements the goals of Executive Order B-30-15. The objectives of SB 350 are to increase the procurement of electricity from renewable sources from 33 percent to 50 percent (with interim targets of 40 percent by 2024, and 25 percent by 2027) and to double the energy efficiency savings in electricity and natural gas end uses of retail customers through energy

efficiency and conservation. SB 350 also reorganizes the Independent System Operator to develop more regional electricity transmission markets and improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

AB 398 (Market-Based Compliance Mechanisms)

Signed on July 25, 2017, AB 398 extended the duration of the Cap-and-Trade program from 2020 to 2030. AB 398 required CARB to update the Scoping Plan and for all GHG rules and regulations adopted by the State. It also designated CARB as the statewide regulatory body responsible for ensuring that California meets its statewide carbon pollution reduction targets, while retaining local air districts' responsibility and authority to curb TACs and criteria pollutants from local sources that severely impact public health. AB 398 also decreased free carbon allowances over 40 percent by 2030 and prioritized Cap-and-Trade spending to various programs including reducing diesel emissions in impacted communities.

SB 150 (Regional Transportation Plans)

Signed on October 10, 2017, SB 150 aligns local and regional GHG reduction targets with State targets (i.e., 40 percent below their 1990 levels by 2030). SB 150 creates a process to include communities in discussions on how to monitor their regions' progress on meeting these goals. The bill also requires the CARB to regularly report on that progress, as well as on the successes and the challenges regions experience associated with achieving their targets. SB 150 provides for accounting of climate change efforts and GHG reductions and identify effective reduction strategies.

SB 100 (California Renewables Portfolio Standard [RPS] Program: Emissions of Greenhouse Gases)

Signed into law in September 2018, SB 100 increased California's renewable electricity portfolio from 50 to 60 percent by 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045.

AB 1346 (Air Pollution: Small Off-Road Engines)

Signed into Law in October 2021, AB 1346 requires CARB, to adopt cost-effective and technologically feasible regulations to prohibit engine exhaust and evaporative emissions from new small off-road engines, consistent with federal law, by July 1, 2022. The bill requires CARB to identify and, to the extent feasible, make available funding for commercial rebates or similar incentive funding as part of any updates to existing applicable funding program guidelines to local air pollution control districts and air quality management districts to implement to support the transition to zero-emission small off-road equipment operations.

AB 1279 (The California Climate Crisis Act)

AB 1279 establishes the policy of the State to achieve carbon neutrality as soon as possible, but no later than 2045; to maintain net negative GHG emissions thereafter; and to ensure that by 2045 statewide anthropogenic GHG emissions are reduced at least 85 percent below 1990 levels. The bill requires CARB to ensure that Scoping Plan updates identify and recommend measures to achieve carbon neutrality, and to identify and implement policies and strategies that enable CO^2 removal solutions and carbon capture, utilization, and storage technologies.

SB 1020 (100 Percent Clean Electric Grid)

Signed on September 16, 2022, SB 1020 provides additional goals for the path to the 2045 goal of 100 percent clean electricity retail sales. It creates a target of 90 percent clean electricity retail sales by 2035 and 95 percent clean electricity retail sales by 2040.

SB 905 (Carbon Sequestration Program)

Signed on September 16, 2022, SB 905 establishes regulatory framework and policies that involve carbon removal, carbon capture, utilization, and sequestration. It also prohibits the injecting of concentrated carbon dioxide fluid into a Class II injection well for the purpose of enhanced oil recovery.

AB 1757 (Nature-Based Solutions)

Signed on September 16, 2022, AB 1757 requires State agencies to develop a range of targets for natural carbon sequestration and nature-based climate solutions that reduce GHG emissions to meet the 2030, 2038, and 2045 goals which would be integrated into a scoping plan addressing natural and working lands.

CARB Advanced Clean Truck Regulation

CARB adopted the Advanced Clean Truck Regulation in June 2020 requiring truck manufacturers to transition from diesel trucks and vans to electric zero-emission trucks beginning in 2024. By 2045, every new truck sold in California is required to be zero-emission. This rule directly addresses disproportionate risks and health and pollution burdens and puts California on the path for an all zero-emission short-haul drayage fleet in ports and railyards by 2035, and zero-emission "last-mile" delivery trucks and vans by 2040. The Advanced Clean Truck Regulation accelerates the transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8. The regulation has two components including a manufacturer sales requirement, and a reporting requirement:

- Zero-Emission Truck Sales: Manufacturers who certify Class 2b through 8 chassis or complete vehicles with combustion engines are required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales need to be 55 percent of Class 2b – 3 truck sales, 75 percent of Class 4 – 8 straight truck sales, and 40 percent of truck tractor sales.
- Company and Fleet Reporting: Large employers including retailers, manufacturers, brokers, and others would be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, would be required to report about their existing fleet operations. This information would help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

AB 1384 (Resiliency Through Adaptation, Economic Vitality, and Equity Act)

Signed on September 16, 2022, AB 1384 requires the release of a draft Safeguarding California Plan by January 1, 2024, and every three years thereafter. The intent of AB 1384 is to prioritize the most vulnerable communities, ecosystems, and economic sectors in the State's climate adaptation and resilience strategy set forth in the Safeguarding California Plan by ensuring that all State departments and agencies accurately identify, collaboratively prepare for, and are sufficiently resourced to adequately respond to the impacts of climate change, such as extreme weather events, the urban heat island effect, habitat loss, wildfire, sea level rise, and drought.

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs using executive orders. Although not regulatory, they set the tone for the State and guide the actions of State agencies.

Executive Order S-3-05. Executive Order S-3-05 was issued on June 1, 2005, which established the following GHG emissions reduction targets:

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

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07. Issued on January 18, 2007, Executive Order S-01-07 mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. The executive order established a Low Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, CARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. CARB adopted the LCFS on April 23, 2009.

Executive Order S-13-08. Issued on November 14, 2008, Executive Order S-13-08 facilitated the California Natural Resources Agency development of the 2009 California Climate Adaptation Strategy. Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order S-14-08. Issued on November 17, 2008, Executive Order S-14-08 expands the State's Renewable Energy Standard to 33 percent renewable power by 2020. Additionally, Executive Order S-21-09 (signed on September 15, 2009) directs CARB to adopt regulations requiring 33 percent of electricity sold in the State come from renewable energy by 2020. CARB adopted the Renewable Electricity Standard on September 23, 2010, which requires 33 percent renewable energy by 2020 for most publicly owned electricity retailers.

Executive Order S-21-09. Issued on July 17, 2009, Executive Order S-21-09 directs CARB to adopt regulations to increase California's RPS to 33 percent by 2020. This builds upon SB 1078 (2002), which established the California RPS program, requiring 20 percent renewable energy by 2017, and SB 107 (2006), which advanced the 20 percent deadline to 2010, a goal which was expanded to 33 percent by 2020 in the 2005 Energy Action Plan II.

Executive Order B-30-15. Issued on April 29, 2015, Executive Order B-30-15 established a California GHG reduction target of 40 percent below 1990 levels by 2030 and directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of CO_2e ($MMTCO_2e$). The 2030 target acts as an interim goal on the way to achieving reductions of 80 percent below 1990 levels by 2050, a goal set by Executive Order S-3-05. The executive order also requires the State's climate adaptation plan to be updated every three years and for the State to continue its climate change research program, among

other provisions. With the enactment of SB 32 in 2016, the Legislature codified the goal of reducing GHG emissions by 2030 to 40 percent below 1990 levels.

Executive Order B-55-18. Issued on September 10, 2018, Executive Order B-55-18 establishes a goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. This goal is in addition to the existing statewide targets of reducing GHG emissions. The executive order requires CARB to work with relevant State agencies to develop a framework for implementing this goal. It also requires CARB to update the Scoping Plan to identify and recommend measures to achieve carbon neutrality. The executive order also requires State agencies to develop sequestration targets in the Natural and Working Lands Climate Change Implementation Plan.

Executive Order N-79-20. Signed in September 2020, Executive Order N-79-20 establishes as a goal that where feasible, all new passenger cars and trucks, as well as all drayage/cargo trucks and off-road vehicles and equipment, sold in California, will be zero-emission by 2035. The executive order sets a similar goal requiring that all medium and heavy-duty vehicles will be zero-emission by 2045 where feasible. It also directs CARB to develop and propose rulemaking for passenger vehicles and trucks, medium-and heavy-duty fleets where feasible, drayage trucks, and off-road vehicles and equipment "requiring increasing volumes" of new ZEVs "towards the target of 100 percent." The executive order directs the California Environmental Protection Agency, the California Geologic Energy Management Division (CalGEM), and the California Natural Resources Agency to transition and repurpose oil production facilities with a goal toward meeting carbon neutrality by 2045. Executive Order N-79-20 builds upon the CARB Advanced Clean Trucks regulation, which was adopted by CARB in July 2020.

California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

Title 20 Appliance Efficiency Regulations. The appliance efficiency regulations (California Code of Regulations [CCR] Title 20, Sections 1601-1608) include standards for new appliances. Twenty-three categories of appliances are included in the scope of these regulations. These standards include minimum levels of operating efficiency, and other cost-effective measures, to promote the use of energy- and water-efficient appliances.

Title 24 Building Energy Efficiency Standards. California's Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6) was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The California Energy Commission (CEC) adopted the 2022 Energy Code on August 11, 2021, which was subsequently approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Title 24 standards will result in less energy use, thereby reducing air pollutant emissions associated with energy consumption across California. For example, the 2022 Title 24 standards will require efficient electric heat pumps,

establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, and strengthens ventilation standards.

Title 24 California Green Building Standards Code. The California Green Building Standards Code (CCR Title 24, Part 11 code) commonly referred to as the CALGreen Code, is a statewide mandatory construction code developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency/conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code went into effect on January 1, 2023 (2022 CALGreen). The 2022 CALGreen standards continue to improve upon the existing standards for new construction of, and additions and alterations to, residential and nonresidential buildings.

3.3 Regional

South Coast Air Quality Management District Thresholds

The South Coast Air Quality Management District (SCAQMD) formed a GHG California Environmental Quality Act (CEQA) Significance Threshold Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. This Working Group was formed to assist SCAQMD's efforts to develop a GHG significance threshold and included a wide variety of stakeholders including the State Office of Planning and Research (OPR), CARB, the Attorney General's Office, a variety of city and county planning departments in the South Coast Air Basin (SCAB), various utilities such as sanitation and power companies throughout the SCAB, industry groups, and environmental and professional organizations. On December 5, 2008, the SCAQMD Governing Board adopted a 10,000 metric tons of carbon dioxide equivalent ($MTCO_2e$) industrial threshold for projects where the SCAQMD is the lead agency. However, the SCAQMD has not announced when a GHG threshold for land use projects will be presented to the governing board where the SCAQMD is not the lead agency. The Working Group proposed a 3,000 $MTCO_2e$ threshold for non-industrial projects, but that threshold has not been formally adopted. During Working Group Meeting #7 it was explained that this threshold was derived using a 90 percent capture rate of a large sampling of industrial facilities. During Meeting #8, the Working Group defined industrial uses as production, manufacturing, and fabrication activities or storage and distribution (e.g., warehouse, transfer facility, etc.). The Working Group indicated that the threshold applies to both emissions from construction and operational phases plus indirect emissions (electricity, water use, etc.). The SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact.

Southern California Association of Governments

On September 3, 2020, SCAG's Regional Council adopted Connect SoCal (2020–2045 Regional Transportation Plan/Sustainable Communities Strategy [2020 RTP/SCS]). The RTP/SCS charts a course for closely integrating land use and transportation so that the region can grow smartly and sustainably. The strategy was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses, and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The RTP/SCS is a long-range vision plan that balances future mobility and

housing needs with economic, environmental, and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by State law to lower regional GHG emissions.

3.4 Local

City of Long Beach General Plan

The Air Quality Element of the City of Long Beach General Plan was adopted in 1996 and sets forth the goals, objectives, and policies that guide the City in the implementation of its air quality improvement programs and strategies. While the Air Quality Element does not specifically address climate change, reductions in other pollutants typically lead to a reduction in GHG emissions. This Element acknowledges the interrelationships among transportation and land use planning in meeting the City's goals. The following goals and policies are applicable to the Project.

Goal 7: Reduce emissions through reduced energy consumption.

Policy 7.1: Energy Conservation. Reduce energy consumption through conservation improvements and requirements.

Action 7.1.4: Encourage the incorporation of energy conservation features in the design of all new construction.

Action 7.1.7: Support efforts to reduce GHG emissions that diminish the stratospheric ozone layer.

City of Long Beach Sustainable City Action Plan

Per CEQA Guidelines Section 15183.5, the City adopted the Sustainable City Action Plan on February 2, 2010. The Sustainable City Action Plan is intended to guide operational, policy and financial decisions to create a more sustainable City. The Sustainable City Action Plan includes initiatives, goals and actions that will move the City toward becoming more sustainable. The Sustainable City Action Plan includes chapters related to buildings and neighborhoods, energy, green economy and lifestyle, transportation, urban nature, waste reduction, and water. Implementation of this plan would contribute to a reduction in the City's overall GHG emissions.

City of Long Beach Climate Action and Adaption Plan

Pursuant to California SB 379, all California cities and counties are required to include climate adaptation and resiliency strategies in their general plans to ensure safety and protection of their community in the future. The City has developed a Climate Change Action and Adaptation Plan that provides a framework for creating or updating policies, programs, practices, and incentives for Long Beach residents and businesses to reduce the City's GHG footprint, and ensure the community and physical assets are better protected from the impacts of climate change. The Long Beach Climate Action Plan (LB CAP), also known as the Climate Action and Adaptation Plan, was approved by the City Council on August 16, 2022. The climate action/mitigation element of the Climate Change Action and Adaptation Plan will include the following steps:

- A GHG inventory of emissions from various sectors in the Long Beach community, such as building energy, transportation, solid waste, and wastewater.

- A forecast of projected emissions based on anticipated city growth.
- Development of GHG reduction targets based on the latest climate science, and local, regional, State, and federal context and requirements.
- Analysis of existing sustainability and climate mitigation efforts.
- Development of additional GHG mitigation strategies to reduce future emissions from key sectors.
- Development of a framework for implementing mitigation strategies.
- A plan to monitor the performance of the mitigation strategies using performance metrics to track GHG reduction targets.

City of Long Beach Municipal Code

Section 21.45.400 of the Long Beach Municipal Code (LBMC) further regulates public and private development to include various standards that promote green buildings. A green building, also known as a sustainable building, is a structure that is designed, built, renovated, operated, or reused in an ecological and resource-efficient manner. Green buildings are designed to meet certain objectives such as protecting occupant health; improving employee productivity; using energy, water and other resources more efficiently; and reducing the overall impact on the environment. The City of Long Beach recognizes the benefit of green buildings and establishes a green building program.

City of Long Beach Green Building Ordinance

City of Long Beach Green Building Ordinance On May 12, 2009, the Long Beach City Council approved Ordinance No. ORD- 09-0013 (Subsection 21.45.400—Green Building Standards for Public and Private Development). The following types of project shall meet the intent of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) program at the Certified level:

- A new residential or mixed use building of 50 dwelling units and 50,000 gross square feet or more.
- A new mixed use, or non-residential building of 50,000 square feet or more of gross floor area;
- The alteration of an existing residential or mixed use building that results in the addition of 50 dwelling units and 50,000 gross square feet or more;
- The alteration of an existing mixed use, or non-residential building that results in the expansion of 50,000 gross square feet or more; and
- A new construction or substantial rehabilitation project for which the City provides any portion of funding.

4 SIGNIFICANCE CRITERIA AND METHODOLOGY

4.1 Thresholds and Significance Criteria

Addressing GHG emissions generation impacts requires an agency to determine what constitutes a significant impact. The amendments to the CEQA Guidelines specifically allow lead agencies to determine thresholds of significance that illustrate the extent of an impact and are a basis from which to apply mitigation measures. This means that each agency is left to determine whether a project's GHG emissions will have a "significant" impact on the environment. The guidelines direct that agencies are to use "careful judgment" and "make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" the project's GHG emissions.[11]

Based upon the criteria derived from Appendix G of the CEQA Guidelines, a project normally would have a significant effect on the environment if it would:

- **GHG-1:** Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance; or
- **GHG-2:** Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

The City of Long Climate Action and Adaptation Plan (CAAP)[12] was adopted on August 16, 2022, and is a comprehensive planning document outlining the City's proposed approach both to address climate impacts on Long Beach and to reduce Long Beach's impact on the climate by reducing GHG emissions. The City's CAAP meets the requirements of State CEQA Guidelines, Section 15183.5; therefore, the proposed project will be evaluated for consistency with the City's CAAP. Development projects that can demonstrate consistency with the Climate Action + Adaptation Plan Consistency Review Checklist (CAAP Checklist) would have less than significant impacts with regard to GHG emissions.

4.2 Methodology

The Project's construction and operational emissions were calculated using the California Emissions Estimator Model version 2022.1 (CalEEMod). Details of the modeling assumptions and emission factors are provided in **Appendix A: Greenhouse Gas Emissions Data**. For construction, CalEEMod calculates emissions from off-road equipment usage and on-road vehicle travel associated with haul, delivery, and construction worker trips. GHG emissions during construction were forecasted based on the proposed construction schedule and applying the mobile-source and fugitive dust emissions factors derived from CalEEMod. The Project's construction-related GHG emissions would be generated from off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicles.

The Project's operational-related GHG emissions would be generated by vehicular traffic, area sources (e.g., landscaping maintenance, consumer products), electrical generation, natural gas consumption, water supply and wastewater treatment, and solid waste. Project-generated vehicle emissions are based on trip generation within the *First-Citizens Bank - Long Beach Project Draft Initial Study* (Initial Study), prepared by Kimley-Horn (dated May 2024). The number of trips generated by the proposed Project was approximated using the Institute of Transportation Engineers (ITE) land use code 710 (General Office

[11] 14 California Code of Regulations, Section 15064.4a
[12] City of Long Beach. 2022. Long Beach Climate Action Plan. August. Website: https://longbeach.gov/ globalassets/lbds/media-library/documents/planning/lb-cap/adopted-lb-cap_-aug-2022.

Building) and ITE land use code 911 (Walk-In Bank). According to the Initial Study, the Project would generate 293 total daily vehicle trips. The Project-generated trips have been incorporated into CalEEMod as recommended by the SCAQMD.

5 POTENTIAL IMPACTS AND MITIGATION

5.1 Greenhouse Gas Emissions

Threshold GHG-1: Would the project generate GHG emissions, either directly or indirectly, that could have a significant impact on the environment?

Short-Term Construction Greenhouse Gas Emissions

Project construction would result in direct emissions of carbon dioxide (CO_2), nitrous oxide (N_2O), and methane (CH_4) from construction equipment, the transport of materials, and construction worker travel to and from the Project site. Once construction is complete, the generation of construction-related GHG emissions would cease. Construction GHG emissions are typically summed and amortized over the lifetime of the proposed Project (assumed to be 30 years), then added to the operational emissions.

Total GHG emissions generated during all phases of construction for the proposed Project were combined and are presented in **Table 2: Construction-Related Greenhouse Gas Emissions.** The exact construction timeline is unknown; however, to be conservative, earlier dates were utilized in the modeling. This approach is conservative given that emissions factors decrease in future years due to regulatory and technological improvements and fleet turnover. See **Appendix A** for additional information regarding the construction assumptions used in this analysis.

Table 2: Construction-Related Greenhouse Gas Emissions

Category	$MTCO_2e$
Year 1 Construction Emissions (2024)	29
Year 2 Construction Emissions (2025)	167
30-Year Amortized Construction	7
Source: CalEEMod version 2022.1. Refer to Appendix A for model outputs.	

As shown in **Table 2**, the Project would result in the generation of approximately 196 $MTCO_2e$ over the course of construction. Construction GHG emissions are typically summed and amortized over the lifetime of the Project (assumed to be 30 years), then added to the operational emissions.[13] The amortized Project construction emissions would be 7 $MTCO_2e$ per year. Once construction is complete, the generation of these GHG emissions would cease.

Long-Term Operational Greenhouse Gas Emissions

Operational (long-term emissions) would occur over the proposed Project's life. The proposed Project would result from direct emissions such as vehicular traffic and operation of any landscaping equipment. Operational GHG emissions would also result from indirect sources, such as off-site generation of electrical power, the energy required to convey water and wastewater, and emissions associated with solid waste, and any fugitive refrigerants from HVAC equipment.

Total GHG emissions associated with the Project are summarized in **Table 3: Project Greenhouse Gas Emissions** for informational purposes only.

[13] The project lifetime is based on the standard 30-year assumption of the South Coast Air Quality Management District (South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13,* August 26, 2009).

Table 3: Project Greenhouse Gas Emissions

Emissions Source	$MTCO_2e$ per Year[1]
Proposed Emissions	
Construction Amortized over 30 Years	7
Area Source	0.26
Energy	53
Generator[2]	20
Mobile	235
Waste	4
Water & Wastewater	0.01
Total Emissions[2]	**319**
SCAQMD Project Threshold	3,000
Exceeds Threshold?	**No**

Source: CalEEMod version 2022.1. Refer to Appendix A for model outputs.
1. Totals may not add up due to rounding.
2. Emissions from the generator are calculated using CalEEMod Guide Appendix D, Table 12.1 and updated with CARB 2021 EMission FACtor Off-Road model (EMFAC), see Appendix A for more information.

As shown in **Table 3**, the Project would generate approximately 319 $MTCO_2e$ annually from both construction and operations and would not exceed the SCAQMD's proposed GHG threshold of 3,000 $MTCO_2e$ per year.[14] Approximately 88 percent of the proposed Project's emissions are from energy and mobile sources which would be further reduced by implementation of Statewide programs and measures, including the reduction in the carbon content of fuels, CARB's advanced clean car program, CARB's mobile source strategy, fuel efficiency standards, cleaner technology, and fleet turnover. Additionally, SCAG's 2020-2045 RTP/SCS is also expected to help California reach its GHG reduction goals, with reductions in per capita transportation emissions of 19 percent by 2035.[15] Accordingly, the proposed Project would not interfere with the State's efforts to reduce GHG emissions in 2030.

Project operations would benefit from the implementation of current and potential future energy regulations including the SB 100 renewable electricity portfolio target of 60 percent renewable energy by 2030. SB 100 also established a further goal to have an electric grid that is entirely powered by clean energy by 2045. It should be noted that the proposed Project would comply with the 2022 Title 24 Part 6 Building Energy Efficiency Standards (2022 Energy Code). Among other updates, the 2022 Energy Code includes updated standards including new electric heat pump requirements for offices and banks; and the expansion of solar PV and battery storage standards to additional land uses including offices. Projects whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code. Title 24 is part of the State's plans and regulations for reducing emissions of GHGs to meet and

[14] On September 28, 2010, air quality experts serving on the South Coast AQMD GHG CEQA Significance Threshold Stakeholder Working Group recommended an interim screening level numeric bright-line threshold of 3,000 $MTCO_2e$ annually. The Working Group was formed to assist the South Coast AQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the State Office of Planning and Research (OPR), CARB, the Attorney General's Office, various city and county planning departments. The numeric bright line and efficiency-based thresholds, which were developed for consistency with CEQA requirements for developing significance thresholds, are supported by substantial evidence and provide guidance to CEQA practitioners and lead agencies for determining whether GHG emissions from a proposed project are significant.

[15] Southern California Association of Governments. *SB 375 Regional Plan Climate Targets.* <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets> (accessed April 17, 2023).

exceed AB 32 and SB 32 energy reduction goals. Therefore, the proposed Project would have a less than significant impact on GHG emissions.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact.

5.2 Greenhouse Gas Reduction Plan Compliance

Threshold GHG-2: Would the project conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing GHG emissions?

City of Long Beach Climate Action Plan

The City of Long Beach adopted its Climate Action Plan (LB CAP) in August 2022 to use as a guide towards meeting long term GHG emissions reduction goals and creating a community that is more resilient to the effects of climate change. The LB CAP outlines a range of actions the City will take to reduce GHG emissions and adapt to the effects of climate change. These actions are organized by themes, economic sectors, and types of climate stressors, including Extreme Heat, Air Quality, Drought, Sea Level Rise + Flooding, Building + Energy, Transportation, and Waste Management.

To address project-level consistency with the LB CAP under CEQA, the City has prepared a five-step Climate Action + Adaptation Plan Consistency Review Checklist (CAAP Checklist) to streamline the environmental review process. The CAAP Checklist procedure requires that projects demonstrate consistency with the City's General Plan (Step 1), determine if projects screen out of the CAAP Action consistency (Step 2), demonstrate consistency with the CAAP GHG Emission Reduction Actions (Step 3), identify alternative project emission reduction measures and additional GHG reductions (Step 4), and demonstrate consistency with the CAAP Adaptation Actions (Step 5). All projects must complete Steps 1, 2, 3, and 5.

Step 1 of the CAAP Checklist consistency evaluation is related to whether the proposed Project is consistent with the City's General Plan Land Use Element and the underlying assumptions related to population growth. The proposed Project consists of a 12,469 SF office/bank building. Implementation of the proposed Project would not require a change in land use designation or zoning and would be consistent with the existing land use designations on the Project site. The proposed Project does not include new housing that would result in population growth. Once operational, the proposed building would employ approximately 24 people and would serve varying numbers of bank customers. Based on Project plans, the building would have a maximum capacity of approximately 60 to 80 people at one time. It is assumed that these people would be drawn from the surrounding community.[16] Both the proposed building and the number of employees and visitors it would support would not be inconsistent with the CAAP's forecasts. The proposed Project would be unlikely to produce new population growth, and it would be consistent with the Land Use Element of the City's General Plan. Based on this conclusion, the analysis proceeds to the CAAP Action Consistency review (Step 2) of the CAAP Checklist.

Step 2 of the CAAP Checklist provides CAAP Action Screening Criteria that allows certain projects to screen out of further CAAP Checklist consistency review. This includes local-serving retail less than 50,000 SF. The proposed Project would develop a 12,469 SF office/bank building, less than the 50,000 SF threshold. Based on this conclusion, the analysis proceeds to Step 3, demonstrating consistency with the CAAP GHG Emissions Reduction Actions.

Step 3 of the CAAP Checklist requires consistency with GHG Emission Reduction Actions. Only Checklist Items 1, 3, 5, 6, 7, 8, and 15 are applicable to the proposed Project. Checklist Item 1 requires projects to utilize 100% zero-carbon electricity onsite by: 1) installing on-site renewable energy systems or

[16] The City of Long Beach's Traffic Impact Analysis Guidelines assumes that retail development that is 50,000 SF or less is likely to be local-serving and tends to shorten trips within Long Beach. See Traffic Impact Analysis Guidelines, Section 2.2.4, June 2020.

participating in a community solar program to supply 100% of the Project's estimated energy demand to the maximum extent feasible; 2) Participating in Southern California Edison at the Green Rate level (i.e., 100% carbon-free electricity) for all electricity accounts associated with the Project until which time SCE provides 100% carbon-free electricity for all accounts by default; or 3) a combination of #1 and #2. The proposed Project includes installation of a rooftop solar array that will produce some of the electricity utilized on site; however, the SCE Green Rate program, which is primarily intended for residential customers, has exceeded the amount of capacity available from Green Rate resources and is currently waitlisting new customers. Accordingly, it is not feasible to meet the requirements of Checklist Item 1 at this time and it is not applicable to the proposed Project.

Checklist Item 3 requires all projects to comply with all City building energy codes and ordinances. The proposed Project would comply with all applicable City building energy codes and ordinances; therefore, the proposed Project would be consistent with Checklist Item 3. Checklist Items 5, 6, and 7 require compliance with all state and local requirements for recycling, composting and organic waste collection, and incorporation of organic waste processing capabilities. The proposed Project would comply with LBMC Chapter 8.60, *Solid Waste, Recycling, and Litter Prevention and Organic Waste Disposal Reduction*, as well as all other applicable municipal code requirements and would therefore be consistent with Checklist Items 5 and 6. Checklist Item 7 is a voluntary measure, and the proposed Project may incorporate some of these capabilities as is feasible for the type of project being developed. Checklist Item 8 provides transportation criteria, that screens out projects with local-serving retail less than 50,000 SF. As the proposed Project falls within this category, it can skip Checklist Items 9 through 14. Checklist Item 15 encourages projects to maximize high density, mixed use, transit-oriented and walkable infill project design. Some of the characteristics identified in Checklist Item 15 that are applicable to the proposed Project include local-serving retail and shared and reduced parking strategies, such as EV-only spaces. The Project provides a retail use in a smaller building and would include EV-only parking spaces with EV charging capacity. Accordingly, the proposed Project is consistent with the policies of the LB CAP and any conflict with LB CAP policies would be less than significant.

2022 Electric Code

The 2022 Energy Code was adopted on August 11, 2021 and approved for inclusion into the California Building Standards Code in December 2021. The 2022 Energy Code is focused on energy use in buildings and are encourages use of efficient electric heat pumps, establishment of electric-ready requirements for new homes, expansion of solar photovoltaic and battery storage standards, and strengthened ventilation standards. A requirement of the 2022 Energy Code is that new buildings with permit applications applied for on or after January 1, 2023, must comply with the requirements of the 2022 Energy Code. As the proposed Project will begin construction after January 2023, it will be obligated to comply with the requirements of the 2022 Energy Code. Accordingly, the proposed Project would not conflict with the requirements of the 2022 Electric Code and any impact would be less than significant.

CALGreen

CALGreen is the State of California's mandatory green building standards code. CALGreen requires new commercial buildings to comply with mandatory measures under five topical areas: planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. The proposed Project would be obligated to incorporate all applicable mandatory

measures required by CALGreen. Accordingly, the proposed Project would not conflict with the requirements of the CALGreen and any impact would be less than significant.

California Air Resource Board Scoping Plan Consistency

The 2022 Scoping Plan sets a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels by 2045 in accordance with AB 1279, the California Climate Crisis Act. Currently, the transportation, electricity, and industrial sectors are the largest GHG contributors in the State. The 2022 Scoping Plan plans to achieve the targets established by AB 1279 primarily through zero-emission transportation (e.g., electrifying cars, buses, trains, and trucks and decarbonizing the electricity and industrial sectors.

As discussed above, approximately 90 percent of the proposed Project's GHG emissions are from energy and mobile sources which would be further reduced by the 2022 Scoping Plan measures directed towards zero-emission transportation. It should be noted that the City has no control over vehicle emissions (approximately 90 percent of the proposed Project's total emissions). However, these emissions would decline in the future due to statewide measures encouraging reductions in GHGs, as well as the introduction of cleaner technology and fleet turnover. Further, the proposed Project would not obstruct or interfere with efforts to increase zero emission vehicles (ZEVs) or State efforts to improve system efficiency. Compliance with applicable State standards would ensure consistency with State and regional GHG reduction planning efforts, including the 2022 Scoping Plan. Therefore, the proposed Project would result in a less-than-significant impact related to conflict with the 2022 Scoping Plan.

Regional Transportation Plan/Sustainable Communities Strategy Consistency

On September 3, 2020, SCAG's Regional Council adopted Connect SoCal (2020 RTP/SCS). The RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, nonprofit organizations, businesses, and local stakeholders in the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. SCAG's RTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks for 2020 and 2035 as well as an overall GHG target for the Project region consistent with both the target date of AB 32 and the post-2020 GHG reduction goals of Executive Orders 5-03-05 and B-30-15, described above (Section 3, *Regulatory Setting)*.

The RTP/SCS contains over 4,000 transportation projects, ranging from highway improvements, railroad grade separations, bicycle lanes, new transit hubs and replacement bridges. These future investments were included in county plans developed by the six county transportation commissions and seek to reduce traffic bottlenecks, improve the efficiency of the region's network, and expand mobility choices for everyone. The RTP/SCS is an important planning document for the region, allowing project sponsors to qualify for federal funding.

The plan accounts for operations and maintenance costs to ensure reliability, longevity, and cost effectiveness. The RTP/SCS is also supported by a combination of transportation and land use strategies that help the region achieve State GHG emissions reduction goals and FCAA requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry, and utilize resources more efficiently. GHG emissions resulting from development-related mobile sources are the most potent source of emissions, and therefore Project comparison to the RTP/SCS is an appropriate

indicator of whether the Project would inhibit the post-2020 GHG reduction goals promulgated by the State. The Project's consistency with the RTP/SCS goals is analyzed in detail in **Table 4: Regional Transportation Plan/Sustainable Communities Strategy Consistency**.

Table 4: Regional Transportation Plan/Sustainable Communities Strategy Consistency

SCAG Goals		Compliance	
GOAL 5:	Reduce greenhouse gas emissions and improve air quality.	**Consistent.**	The proposed Project would be required to comply with California Building Energy Efficiency Standards and CALGreen, thus would not dramatically impact air quality. The proposed Project's emissions would not exceed the SCAQMD 's 3,000 MTCO2e per year threshold and would result in a less than significant GHG impact.
GOAL 6:	Support healthy and equitable communities	**Consistent.**	As discussed in the Air Quality Assessment, the proposed Project would not exceed regional or localized thresholds for criteria pollutants. Based on the Friant Ranch decision, projects that do not exceed the SCAQMD 's LSTs would not violate any air quality standards, contribute substantially to an existing or projected air quality violation, nor result in no criteria pollutant health impacts.
Source: Southern California Association of Governments, *Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal)*, 2020.			

The goals stated in the RTP/SCS were used to determine consistency with the planning efforts previously stated. As shown in **Table 4**, the proposed Project would be consistent with the stated goals of the RTP/SCS. However, the proposed Project would not conflict with implementation of the stated goals of the RTP/SCS. Therefore, the proposed Project would not result in any significant impacts or interfere with SCAG's ability to achieve the region's post-2020 mobile source GHG reduction targets.

The Project would not conflict with any applicable plan, policy, or regulation of an agency adopted for reducing the emissions of GHGs because the Project would generate low levels of GHGs, and would not impede implementation any applicable GHG reduction plan. Therefore, the impacts would be less than significant.

5.3 Cumulative Setting, Impacts, and Mitigation Measures

Cumulative Setting

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about 1 day), GHGs have much longer atmospheric lifetimes of 1 year to several thousand years that allow them to be dispersed around the globe.

Cumulative Impacts

It is generally the case that an individual project of this size and nature is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. The additive effect of Project-related GHG emissions would not result in a reasonably foreseeable cumulatively considerable contribution to global climate change. In addition, the Project as well as other cumulative related projects would also be subject to all applicable regulatory requirements, which would further reduce GHG emissions. As discussed above, the Project would not conflict with the CAAP Checklist, the RTP/SCS, the CARB Scoping Plan, or any other GHG reduction plan. Therefore, the Project's cumulative contribution of GHG emissions would be less than significant and the Project's cumulative GHG impacts would also be less than cumulatively considerable.

Mitigation Measures: No mitigation is required.

Level of Significance: Less than significant impact.

6 REFERENCES

1. California Air Resources Board, *California's 2017 Climate Change Scoping Plan,* 2017.
2. City of Long Beach, City of Long Beach General Plan. Available at: https://www.longbeach.gov/lbcd/planning/advance/general-plan/.
3. City of Long Beach, *Long Beach Climate Action Plan*, August 2022. Available at: https://longbeach.gov/ globalassets/lbds/media-library/documents/planning/lb-cap/adopted-lb-cap_-aug-2022.
4. Intergovernmental Panel on Climate Change, *Climate Change 2007: The Physical Science Basis*, 2007.
5. Intergovernmental Panel on Climate Change, *Climate Change 2013: The Physical Science Basis, Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, 2013.
6. National Research Council, *Advancing the Science of Climate Change*, 2010.
7. State of California, *Code of Regulations Section 15065.5a*, 2018.
8. Southern California Association of Governments, *2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal)*, 2020.
9. Southern California Association of Governments, *Final Federal Safer, Affordable, Fuel-Efficient Vehicles Rule Part I (Supplemental Report)*. Available online at: http://www.scag.ca.gov/committees/CommitteeDocLibrary/EEC_Item8_RC_Item10%20Supplemental%20Report .pdf.
10. South Coast Air Quality Management District, *Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #13*, 2009.
11. U.S. Department of Transportation and U.S. EPA. 2019, *One National Program Rule on Federal Preemption of State Fuel Economy Standards*. Available online at: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100XI4W.pdf, accessed February 2023.
12. U.S. EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016*, 2018.
13. U.S. EPA, *Methane and Nitrous Oxide Emission from Natural Sources*, 2010.
14. U.S. EPA, *Midterm Evaluation of Light-Duty Vehicle Greenhouse Gas Emissions Standards for Model Years 2022-2025*. Available online at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/midterm-evaluation-light-duty-vehicle-greenhouse-gas, accessed February 2023.
15. U.S. EPA, *Overview of Greenhouse Gases*, 2018.

Appendix A

Greenhouse Gas Emissions Data

FCB Long Beach Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	FCB Long Beach
Construction Start Date	11/1/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.30
Precipitation (days)	17.4
Location	3450 Long Beach Blvd, Long Beach, CA 90807, USA
County	Los Angeles-South Coast
City	Long Beach
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4726
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Long Beach Gas & Oil
App Version	2022.1.1.12

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Bank (with Drive-Through)	3.12	1000sqft	0.07	3,120	8,611	—	—	—
Parking Lot	16.4	1000sqft	0.38	0.00	0.00	—	—	—
General Office Building	9.58	1000sqft	0.22	9,580	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.64	0.54	5.23	7.26	0.01	0.22	0.07	0.29	0.20	0.02	0.22	—	1,427	1,427	0.06	0.02	0.39	1,435
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.46	6.31	11.5	11.2	0.02	0.54	5.43	5.97	0.49	2.60	3.09	—	1,903	1,903	0.08	0.03	0.02	1,914
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.48	0.74	3.82	5.22	0.01	0.16	0.38	0.43	0.15	0.17	0.22	—	1,004	1,004	0.04	0.02	0.14	1,010
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.09	0.14	0.70	0.95	< 0.005	0.03	0.07	0.08	0.03	0.03	0.04	—	166	166	0.01	< 0.005	0.02	167

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.64	0.54	5.23	7.26	0.01	0.22	0.07	0.29	0.20	0.02	0.22	—	1,427	1,427	0.06	0.02	0.39	1,435
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.46	1.22	11.5	11.2	0.02	0.54	5.43	5.97	0.49	2.60	3.09	—	1,903	1,903	0.08	0.03	0.02	1,914
2025	1.34	6.31	10.2	10.5	0.02	0.46	5.43	5.90	0.43	2.60	3.03	—	1,900	1,900	0.08	0.03	0.02	1,911
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.13	0.11	1.00	1.05	< 0.005	0.05	0.38	0.43	0.04	0.17	0.22	—	174	174	0.01	< 0.005	0.02	175
2025	0.48	0.74	3.82	5.22	0.01	0.16	0.16	0.32	0.15	0.06	0.21	—	1,004	1,004	0.04	0.02	0.14	1,010
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.02	0.02	0.18	0.19	< 0.005	0.01	0.07	0.08	0.01	0.03	0.04	—	28.8	28.8	< 0.005	< 0.005	< 0.005	28.9
2025	0.09	0.14	0.70	0.95	< 0.005	0.03	0.03	0.06	0.03	0.01	0.04	—	166	166	0.01	< 0.005	0.02	167

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.14	1.35	0.73	7.52	0.02	0.02	0.52	0.54	0.02	0.09	0.11	9.87	1,976	1,986	1.11	0.08	5.58	2,042
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.03	1.25	0.78	6.54	0.01	0.02	0.52	0.54	0.02	0.09	0.11	9.87	1,911	1,921	1.12	0.08	0.17	1,973

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.08	1.29	0.77	6.81	0.01	0.02	0.49	0.51	0.02	0.09	0.11	9.87	1,851	1,861	1.11	0.08	2.30	1,914
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.20	0.24	0.14	1.24	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	1.63	307	308	0.18	0.01	0.38	317

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.03	0.95	0.62	6.88	0.01	0.01	0.52	0.53	0.01	0.09	0.10	—	1,521	1,521	0.08	0.06	5.55	1,548
Area	0.10	0.40	< 0.005	0.55	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.27	2.27	< 0.005	< 0.005	—	2.28
Energy	0.01	0.01	0.10	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	434	434	0.03	< 0.005	—	435
Water	—	—	—	—	—	—	—	—	—	—	—	3.50	19.1	22.6	0.36	0.01	—	34.1
Waste	—	—	—	—	—	—	—	—	—	—	—	6.37	0.00	6.37	0.64	0.00	—	22.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	1.14	1.35	0.73	7.52	0.02	0.02	0.52	0.54	0.02	0.09	0.11	9.87	1,976	1,986	1.11	0.08	5.58	2,042
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.02	0.94	0.68	6.46	0.01	0.01	0.52	0.53	0.01	0.09	0.10	—	1,458	1,458	0.09	0.07	0.14	1,481
Area	—	0.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.01	0.01	0.10	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	434	434	0.03	< 0.005	—	435
Water	—	—	—	—	—	—	—	—	—	—	—	3.50	19.1	22.6	0.36	0.01	—	34.1
Waste	—	—	—	—	—	—	—	—	—	—	—	6.37	0.00	6.37	0.64	0.00	—	22.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03

Total	1.03	1.25	0.78	6.54	0.01	0.02	0.52	0.54	0.02	0.09	0.11	9.87	1,911	1,921	1.12	0.08	0.17	1,973
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.00	0.92	0.66	6.35	0.01	0.01	0.49	0.50	0.01	0.09	0.10	—	1,397	1,397	0.09	0.07	2.26	1,421
Area	0.07	0.37	< 0.005	0.38	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.56	1.56	< 0.005	< 0.005	—	1.56
Energy	0.01	0.01	0.10	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	434	434	0.03	< 0.005	—	435
Water	—	—	—	—	—	—	—	—	—	—	—	3.50	19.1	22.6	0.36	0.01	—	34.1
Waste	—	—	—	—	—	—	—	—	—	—	—	6.37	0.00	6.37	0.64	0.00	—	22.3
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Total	1.08	1.29	0.77	6.81	0.01	0.02	0.49	0.51	0.02	0.09	0.11	9.87	1,851	1,861	1.11	0.08	2.30	1,914
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.18	0.17	0.12	1.16	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	—	231	231	0.01	0.01	0.37	235
Area	0.01	0.07	< 0.005	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.26	0.26	< 0.005	< 0.005	—	0.26
Energy	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	71.8	71.8	< 0.005	< 0.005	—	72.1
Water	—	—	—	—	—	—	—	—	—	—	—	0.58	3.15	3.73	0.06	< 0.005	—	5.65
Waste	—	—	—	—	—	—	—	—	—	—	—	1.05	0.00	1.05	0.11	0.00	—	3.69
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	0.20	0.24	0.14	1.24	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	1.63	307	308	0.18	0.01	0.38	317

3. Construction Emissions Details

3.1. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.50	4.60	5.56	0.01	0.24	—	0.24	0.22	—	0.22	—	858	858	0.03	0.01	—	861
Dust From Material Movemen	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.0	47.0	< 0.005	< 0.005	—	47.2
Dust From Material Movemen	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.78	7.78	< 0.005	< 0.005	—	7.81
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.32	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	66.9	66.9	< 0.005	< 0.005	0.01	67.7
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.72	3.72	< 0.005	< 0.005	0.01	3.77
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.62	0.62	< 0.005	< 0.005	< 0.005	0.62
Vendor	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	0.00
Hauling	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	0.00

3.3. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.41	1.19	11.4	10.7	0.02	0.53	—	0.53	0.49	—	0.49	—	1,713	1,713	0.07	0.01	—	1,719

Dust From Material Movemen	—	—	—	—	—	—	5.31	5.31	—	2.57	2.57	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.74	0.69	< 0.005	0.03	—	0.03	0.03	—	0.03	—	111	111	< 0.005	< 0.005	—	111
Dust From Material Movemen	—	—	—	—	—	—	0.34	0.34	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	18.3	18.3	< 0.005	< 0.005	—	18.4
Dust From Material Movemen	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.48	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	100	100	< 0.005	< 0.005	0.01	102
Vendor	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	0.00
Hauling	0.01	< 0.005	0.12	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	89.3	89.3	< 0.005	0.01	0.01	93.7

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.58	6.58	< 0.005	< 0.005	0.01	6.67
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.77	5.77	< 0.005	< 0.005	0.01	6.06
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.09	1.09	< 0.005	< 0.005	< 0.005	1.10
Vendor	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	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.95	0.95	< 0.005	< 0.005	< 0.005	1.00

3.5. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.29	1.09	10.1	10.0	0.02	0.46	—	0.46	0.43	—	0.43	—	1,714	1,714	0.07	0.01	—	1,720
Dust From Material Movemen	—	—	—	—	—	—	5.31	5.31	—	2.57	2.57	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	30.2	30.2	< 0.005	< 0.005	—	30.3

Dust From Material Movemen	—	—	—	—	—	—	0.09	0.09	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.00	5.00	< 0.005	< 0.005	—	5.01
Dust From Material Movemen	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	98.3	98.3	< 0.005	< 0.005	0.01	99.5
Vendor	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	0.00
Hauling	0.01	< 0.005	0.11	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	87.8	87.8	< 0.005	0.01	0.01	92.0
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.76	1.76	< 0.005	< 0.005	< 0.005	1.78
Vendor	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	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.55	1.55	< 0.005	< 0.005	< 0.005	1.62
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.29	0.29	< 0.005	< 0.005	< 0.005	0.29
Vendor	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	0.00

Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.27

3.7. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	0.52	5.14	6.94	0.01	0.22	—	0.22	0.20	—	0.20	—	1,305	1,305	0.05	0.01	—	1,309
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	0.52	5.14	6.94	0.01	0.22	—	0.22	0.20	—	0.20	—	1,305	1,305	0.05	0.01	—	1,309
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.32	3.17	4.28	0.01	0.13	—	0.13	0.12	—	0.12	—	804	804	0.03	0.01	—	807
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.58	0.78	< 0.005	0.02	—	0.02	0.02	—	0.02	—	133	133	0.01	< 0.005	—	134
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.28	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	56.2	56.2	< 0.005	< 0.005	0.21	57.0
Vendor	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	66.0	66.0	< 0.005	0.01	0.18	69.0
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	53.3	53.3	< 0.005	< 0.005	0.01	53.9
Vendor	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	66.1	66.1	< 0.005	0.01	< 0.005	68.9
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.3	33.3	< 0.005	< 0.005	0.05	33.8
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	40.7	40.7	< 0.005	0.01	0.05	42.5
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.52	5.52	< 0.005	< 0.005	0.01	5.59
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.74	6.74	< 0.005	< 0.005	0.01	7.04
Hauling	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	0.00

3.9. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.61	0.51	4.37	5.31	0.01	0.19	—	0.19	0.18	—	0.18	—	823	823	0.03	0.01	—	826
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.35	0.42	< 0.005	0.02	—	0.02	0.01	—	0.01	—	65.4	65.4	< 0.005	< 0.005	—	65.6
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.8	10.8	< 0.005	< 0.005	—	10.9
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	1.03	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	229	229	0.01	0.01	0.02	232
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.5	18.5	< 0.005	< 0.005	0.03	18.7
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.06	3.06	< 0.005	< 0.005	0.01	3.10
Vendor	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	0.00
Hauling	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	0.00

3.11. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	5.56	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.05	8.05	< 0.005	< 0.005	—	8.08
Architectural Coatings	—	0.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.33	1.33	< 0.005	< 0.005	—	1.34
Architectural Coatings	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	< 0.005	10.8
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.65	0.65	< 0.005	< 0.005	< 0.005	0.66
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11
Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	0.64	0.60	0.36	3.86	0.01	0.01	0.28	0.28	0.01	0.05	0.05	—	815	815	0.05	0.04	2.95	831
Parking Lot	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	0.00
General Office Building	0.39	0.35	0.27	3.02	0.01	< 0.005	0.24	0.25	< 0.005	0.04	0.05	—	706	706	0.03	0.03	2.60	717
Total	1.03	0.95	0.62	6.88	0.01	0.01	0.52	0.53	0.01	0.09	0.10	—	1,521	1,521	0.08	0.06	5.55	1,548
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	0.63	0.59	0.39	3.67	0.01	0.01	0.28	0.28	0.01	0.05	0.05	—	782	782	0.05	0.04	0.08	795
Parking Lot	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	0.00
General Office Building	0.39	0.35	0.29	2.79	0.01	< 0.005	0.24	0.25	< 0.005	0.04	0.05	—	676	676	0.04	0.03	0.07	686
Total	1.02	0.94	0.68	6.46	0.01	0.01	0.52	0.53	0.01	0.09	0.10	—	1,458	1,458	0.09	0.07	0.14	1,481
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Bank (with Drive-Through)	0.11	0.10	0.07	0.64	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	118	118	0.01	0.01	0.19	120
Parking Lot	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	0.00
General Office Building	0.07	0.06	0.05	0.52	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	113	113	0.01	< 0.005	0.19	115
Total	0.18	0.17	0.12	1.16	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	—	231	231	0.01	0.01	0.37	235

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	43.6	43.6	< 0.005	< 0.005	—	43.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	20.9	20.9	< 0.005	< 0.005	—	21.0
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	249	249	0.02	< 0.005	—	250
Total	—	—	—	—	—	—	—	—	—	—	—	—	313	313	0.02	< 0.005	—	315
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	43.6	43.6	< 0.005	< 0.005	—	43.8

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	20.9	20.9	< 0.005	< 0.005	—	21.0
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	249	249	0.02	< 0.005	—	250
Total	—	—	—	—	—	—	—	—	—	—	—	—	313	313	0.02	< 0.005	—	315
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	7.22	7.22	< 0.005	< 0.005	—	7.25
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	3.46	3.46	< 0.005	< 0.005	—	3.48
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	41.2	41.2	< 0.005	< 0.005	—	41.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	51.9	51.9	< 0.005	< 0.005	—	52.1

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	42.8	42.8	< 0.005	< 0.005	—	42.9
Parking Lot	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
General Office Building	0.01	< 0.005	0.07	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.8	77.8	0.01	< 0.005	—	78.0
Total	0.01	0.01	0.10	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	121

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	42.8	42.8	< 0.005	< 0.005	—	42.9
Parking Lot	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
General Office Building	0.01	< 0.005	0.07	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.8	77.8	0.01	< 0.005	—	78.0
Total	0.01	0.01	0.10	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	121
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.09	7.09	< 0.005	< 0.005	—	7.11
Parking Lot	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
General Office Building	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.9	12.9	< 0.005	< 0.005	—	12.9
Total	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.0	20.0	< 0.005	< 0.005	—	20.0

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Products	—	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.10	0.09	< 0.005	0.55	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.27	2.27	< 0.005	< 0.005	—	2.28
Total	0.10	0.40	< 0.005	0.55	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.27	2.27	< 0.005	< 0.005	—	2.28
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	0.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	0.01	< 0.005	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.26	0.26	< 0.005	< 0.005	—	0.26
Total	0.01	0.07	< 0.005	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.26	0.26	< 0.005	< 0.005	—	0.26

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.24	2.16	2.40	0.02	< 0.005	—	3.18
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.26	16.9	20.2	0.34	0.01	—	31.0
Total	—	—	—	—	—	—	—	—	—	—	—	3.50	19.1	22.6	0.36	0.01	—	34.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.24	2.16	2.40	0.02	< 0.005	—	3.18
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.26	16.9	20.2	0.34	0.01	—	31.0
Total	—	—	—	—	—	—	—	—	—	—	—	3.50	19.1	22.6	0.36	0.01	—	34.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.04	0.36	0.40	< 0.005	< 0.005	—	0.53

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.54	2.80	3.34	0.06	< 0.005	—	5.12
Total	—	—	—	—	—	—	—	—	—	—	—	0.58	3.15	3.73	0.06	< 0.005	—	5.65

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	1.57	0.00	1.57	0.16	0.00	—	5.49
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	4.80	0.00	4.80	0.48	0.00	—	16.8
Total	—	—	—	—	—	—	—	—	—	—	—	6.37	0.00	6.37	0.64	0.00	—	22.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	1.57	0.00	1.57	0.16	0.00	—	5.49
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

General Office Building	—	—	—	—	—	—	—	—	—	—	—	4.80	0.00	4.80	0.48	0.00	—	16.8
Total	—	—	—	—	—	—	—	—	—	—	—	6.37	0.00	6.37	0.64	0.00	—	22.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.26	0.00	0.26	0.03	0.00	—	0.91
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.79	0.00	0.79	0.08	0.00	—	2.78
Total	—	—	—	—	—	—	—	—	—	—	—	1.05	0.00	1.05	0.11	0.00	—	3.69

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	11/1/2024	11/28/2024	5.00	20.0	—
Grading	Grading	11/29/2024	1/9/2025	5.00	30.0	—
Building Construction	Building Construction	1/10/2025	11/20/2025	5.00	225	—
Paving	Paving	11/21/2025	12/31/2025	5.00	29.0	—

Architectural Coating	Architectural Coating	12/2/2025	12/31/2025	5.00	22.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	6.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	6.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	4.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	7.00	81.0	0.42
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix

Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	7.50	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	1.27	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	4.06	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	2.08	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	17.5	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.81	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	19,050	6,350	983

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	0.00	0.00	10.0	0.00	—
Grading	300	0.00	22.5	0.00	—
Paving	0.00	0.00	0.00	0.00	0.38

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Bank (with Drive-Through)	0.00	0%
Parking Lot	0.38	100%
General Office Building	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O

2024	0.00	532	0.03	< 0.005
2025	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Bank (with Drive-Through)	189	189	189	69,068	855	999	999	327,100
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	104	104	104	37,904	878	878	878	320,522

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	19,050	6,350	983

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Bank (with Drive-Through)	29,929	532	0.0330	0.0040	133,542
Parking Lot	14,351	532	0.0330	0.0040	0.00
General Office Building	170,718	532	0.0330	0.0040	242,819

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Bank (with Drive-Through)	123,624	120,766
Parking Lot	0.00	0.00
General Office Building	1,702,689	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Bank (with Drive-Through)	2.91	—
Parking Lot	0.00	—
General Office Building	8.91	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Bank (with Drive-Through)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Bank (with Drive-Through)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	6.19	annual days of extreme heat
Extreme Precipitation	4.30	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A

Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	24.9
AQ-PM	53.5
AQ-DPM	78.5
Drinking Water	34.7
Lead Risk Housing	49.3
Pesticides	0.00
Toxic Releases	99.4
Traffic	89.0
Effect Indicators	—

CleanUp Sites	58.2
Groundwater	84.8
Haz Waste Facilities/Generators	52.6
Impaired Water Bodies	87.0
Solid Waste	11.6
Sensitive Population	—
Asthma	59.9
Cardio-vascular	53.6
Low Birth Weights	97.7
Socioeconomic Factor Indicators	—
Education	39.2
Housing	84.5
Linguistic	27.3
Poverty	34.0
Unemployment	63.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	62.92826896
Employed	88.14320544
Median HI	54.77993071
Education	—
Bachelor's or higher	54.85692288
High school enrollment	4.581034262
Preschool enrollment	25.61272937

Transportation	—
Auto Access	19.90247658
Active commuting	57.92377775
Social	—
2-parent households	63.42871808
Voting	70.64031823
Neighborhood	—
Alcohol availability	43.82137816
Park access	54.45912999
Retail density	73.82266136
Supermarket access	56.79455922
Tree canopy	66.80354164
Housing	—
Homeownership	34.47966123
Housing habitability	28.85923264
Low-inc homeowner severe housing cost burden	64.03182343
Low-inc renter severe housing cost burden	79.48158604
Uncrowded housing	39.88194534
Health Outcomes	—
Insured adults	68.56152958
Arthritis	9.2
Asthma ER Admissions	44.5
High Blood Pressure	8.4
Cancer (excluding skin)	6.6
Asthma	72.9
Coronary Heart Disease	7.5
Chronic Obstructive Pulmonary Disease	40.0

Diagnosed Diabetes	30.7
Life Expectancy at Birth	6.7
Cognitively Disabled	32.0
Physically Disabled	17.3
Heart Attack ER Admissions	62.9
Mental Health Not Good	74.9
Chronic Kidney Disease	14.8
Obesity	61.8
Pedestrian Injuries	86.7
Physical Health Not Good	52.6
Stroke	13.0
Health Risk Behaviors	—
Binge Drinking	89.9
Current Smoker	76.6
No Leisure Time for Physical Activity	58.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	14.8
Elderly	9.7
English Speaking	57.9
Foreign-born	50.8
Outdoor Workers	74.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	12.6
Traffic Density	95.7
Traffic Access	87.4

Other Indices	—
Hardship	40.8
Other Decision Support	—
2016 Voting	18.9

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	78.0
Healthy Places Index Score for Project Location (b)	51.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	Wilmington Long Beach Carson

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Anticipated construction schedule
Operations: Vehicle Data	Anticipated trip generation

Emergency Backup Generator Emissions

	Fuel Type	Quantity	HP	LF	Hours/Year per Unit	Hours per Day	HP-hr per day	Total hp-hr per year
Standard Generator	Diesel	1	750	0.74	50	1	750	37,500

	HC	ROG	TOG	CO	NO_X	CO_2	PM_{10}	$PM_{2.5}$	PM	SO_X
Emissions Rates (g/hp-hr)	0.14	1.0205827	1.1249089	2.6	2.85	521.63114	0.15	0.15	0.15	0.00494
Pounds/Day	0.23	1.69	1.86	4.30	4.71	862.50	0.25	0.25	0.25	0.01
Tons/Year	0.01	0.04	0.05	0.11	0.12	21.56	0.01	0.01	0.01	0.00
Metric tons/year						19.56				

Source: Emissions rates from CalEEMod Guide Appenix D, Table 12.1

TABLE 1
CAAP GREENHOUSE GAS EMISSION REDUCTION ACTION CONSISTENCY CHECKLIST

CAAP Action Consistency Requirement	Description of Project Measure(s) / Documentation of Compliance	Project Consistency
STEP 1: General Plan and 2019 Land Use Element Consistency		
1. The Project is Consistent with the City's General Plan Land Use Element The growth projections outlined in the 2019 General Plan Land Use Element were used in the City's CAAP to estimate citywide GHG emissions over time. Therefore, new development projects must be consistent with the Land Use Element to be consistent with the CAAP. In order for City staff to determine a project's consistency with the Land Use Element, please answer the following question and provide explanation with supporting documentation. Is the proposed project consistent with the existing land use designation of the 2019 Land Use Element? **If** "Yes," proceed to the "CAAP Action Consistency" section below. If "No," proceed to **I**tem 2**.**	*Describe how the project is consistent with the City's 2019 General Plan Land Use Element. Provide additional supporting documentation as an attachment as needed.* *OR,* *Explain why the project is not consistent with the City's 2019 General Plan Land Use Element, and whether the project would include a general plan amendment.* The proposed Project's consistency with applicable policies of the City's General Plan is provided as **Attachment 1.**	☑ Yes ☐ No
2. The Project Achieves emissions of 1.4 $MTCO_2e$ per service population or less Does the project achieve emissions of 1.4 $MTCO_2e$ per service population or less? The project must conduct a comprehensive quantitative project-specific analysis of all GHG emissions, consistent with all CEQA guidelines and standard practice for modeling GHG emissions for new development, to demonstrate that the project achieves this efficiency level. If "Yes," the project is consistent with the CAAP and no additional analysis is needed (no project-specific GHG impact analysis would be required). If "No," proceed to **I**tem 3**.**	*If "Yes", attach to this checklist the estimated project emissions and emissions per service population. If the proposed project is determined to result in GHG emissions less than 1.4 $MTCO_2e$ per service population, the project is consistent with the CAAP and the analysis is complete (no project-specific GHG impact analysis would be required). Provide supporting calculation files and documentation for this analysis.* *OR,* *Explain why the project would not achieve GHG emissions less than 1.4 $MTCO_2e$ per service population. Provide supporting calculation files and documentation for this analysis.*	☐ Yes ☐ No Not applicable per Step 1, Item 1 response.
3. I Project Results in Fewer GHG Emissions per Service Population Compared to Existing Land Use Designations The project must achieve one of the following options**.** 1. Does the project result in fewer GHG emissions per service population than the future no-project development based on existing land use designations at the project site? The	*If "Yes" to number 1, attach to this checklist the estimated project emissions under both existing and proposed designation(s) for comparison. Compare the maximum buildout of the existing designation and the maximum buildout of the proposed designation. If the proposed project is determined to result in fewer GHG emissions per service population than the existing designations would produce, proceed to the "CAAP Action Consistency" section of this*	☐ Yes ☐ No Not applicable per Step 1, Item 1 response.

CAAP Action Consistency Requirement	Description of Project Measure(s) / Documentation of Compliance	Project Consistency
applicant must conduct a comprehensive project-specific analysis of all GHG emissions for both the project and the future no-project development, consistent with all CEQA guidelines and standard practice for modeling GHG emissions for new development, to demonstrate that the project achieves this emissions level. If "Yes," proceed to the "CAAP Action Consistency" section below. If "No," proceed to number 2. 2. If there isn't a project-specific GHG emissions analysis available, then the project would likely result in fewer GHG emissions per service population than would existing land use designations at the project site by incorporating key land use design elements. Would the project implement at least <u>one</u> of the following elements? a. The project would result in a higher density of housing and / or jobs located within 0.5 miles of a transit station than was than was contemplated in the General Plan. b. The project includes a mix of uses (i.e., residential, retail, commercial) and is located in a Transit Priority Area or a High Quality Transit Area. c. The project includes more affordable housing units than was contemplated in the General Plan and is located within 0.5 miles of a transit station. d. The project includes local-serving retail less than 50,000 square feet. If "Yes," proceed to the "CAAP Action Consistency" section below. ***<u>If "No," the proposed project may not tier from this document</u> and must prepare a comprehensive project-specific analysis of GHG emissions and impacts and incorporate the measures in the CAAP Checklist to the extent feasible.***	*checklist. Provide supporting calculation files and documentation for this analysis.* *OR,* *If "Yes" to number 2, describe how the project achieves one of the required elements. Provide supporting documentation.* *OR,* *If "No" to both number 1 and number 2, explain why the project would not achieve the same or lower GHG emissions per service population than the existing designations, and why the project does not achieve one of the required elements. Prepare a comprehensive project-specific analysis of GHG emissions and impacts, pursuant to all CEQA guidelines and the City's CEQA approach and incorporate the measures in this Checklist to the extent feasible.*	
STEP 2: CAAP Action Screening Criteria		
Certain projects may screen out of the CAAP Checklist if they meet the following screening criteria: 1. Would the project achieve emissions of 1.4 $MTCO_2e$ per service population or less?	*If "Yes" to #1, attach to this checklist the estimated project emissions and emissions per service population. If the proposed project is determined to result in GHG emissions less than 1.4 $MTCO_2e$ per service population, the project is consistent with the CAAP and the analysis is complete (no project-*	☐ Project Complies ☐ Not Applicable

CAAP Action Consistency Requirement	Description of Project Measure(s) / Documentation of Compliance	Project Consistency
If "Yes", the project is consistent with the CAAP and no additional analysis is needed (no project-specific GHG impact analysis would be required). If "No," proceed to *Building Energy* below.	*specific GHG impact analysis would be required). Provide supporting calculation files and documentation for this analysis.* *OR,* Complete *the "Building Energy," "Transportation," and Waste"* sections of this checklist.	☑ Project Does Not Comply
STEP 3: CAAP Action Consistency		
Building Energy		
1. <u>TIER 1:</u> Zero-Carbon Electricity For all projects except heavy industry (but including light industrial projects), the project must utilize 100% zero-carbon electricity on-site. The project must comply with one of the following options: 1. Install on-site renewable energy systems or participate in a community solar program to supply 100% of the project's estimated energy demand to the maximum extent feasible. 2. Participate in Southern California Edison at the Green Rate level (i.e., 100% carbon-free electricity) for all electricity accounts associated with the project until which time SCE provides 100% carbon-free electricity for all accounts by default. 3. A combination of #1 and #2 above such that 100% of the project's electricity is zero-carbon. **Supports CAAP Measures:** BE-1, BE-2, BE-3	*Describe which project consistency options from the leftmost column you are implementing.* *OR,* *Describe why this action is not applicable to your project.* *OR,* *Describe why such actions are infeasible and identify the alternative measure proposed as a replacement strategy (provide additional documentation as described below)* The SCE Green Rate program, which is primarily intended for residential customers, has exceeded the amount of capacity available from Green Rate resources and is currently waitlisting new customers. Accordingly, it is not feasible to meet the requirements of Checklist Item 1 at this time. The proposed Project would include the installation of a rooftop solar array that will produce some of the electricity utilized on site as an alternative measure.	☐ Project Complies ☐ Not Applicable ☐ Project Does Not Comply ☑ Alternative Measure Proposed
2. <u>TIER 1:</u> MUNICIPAL PROJECTS ONLY: Reduce Energy Use and Supply the Project with Renewable Electricity The Project must incorporate the following design elements to the maximum extent feasible: 1. Incorporate strategic energy management programs to reduce building energy demands. 2. Energy efficiency design features to reduce electricity and natural gas energy use beyond Title 24 Building Energy requirements. 3. Install on-site renewable energy systems, such as rooftop solar PV.	*Describe which project consistency options from the leftmost column you are implementing.* *OR,* *Describe why this action is not applicable to your project.* *OR,* *Describe why such actions are infeasible and identify the alternative measure proposed as a replacement strategy (provide additional documentation as described below)* The proposed Project is a private development. Therefore, this Item is not applicable.	☐ Project Complies ☑ Not Applicable ☐ Project Does Not Comply ☐ Alternative Measure Proposed

CAAP Action Consistency Requirement	Description of Project Measure(s) / Documentation of Compliance	Project Consistency
4. Participate in Southern California Edison at the Green Rate level (i.e., 100% carbon-free electricity) for all electricity accounts associated with the project until which time SCE provides 100% carbon-free electricity for all accounts by default. **Supports CAAP Measures:** BE-6		
3. <u>TIER 1:</u> Comply with all City building energy codes and ordinances The Project must comply with all applicable City building energy codes and ordinances at the time of project approval. This includes, but is not limited to, any requirements for electrification, energy use intensity factors, zero-net-energy construction, CalGreen Tier 2 or other energy measures, or LEED requirements. **Supports CAAP Measures:** BE-7	*Describe which project consistency options from the leftmost column you are implementing.* *OR,* The proposed Project would comply with all applicable City building energy codes and ordinances. *Describe why this action is not applicable to your project.* *OR,* *Describe why such actions are infeasible and identify the alternative measure proposed as a replacement strategy (provide additional documentation as described below)*	☑ Project Complies ☐ Not Applicable ☐ Project Does Not Comply ☐ Alternative Measure Proposed
4. <u>TIER 2:</u> Building Energy Efficiency This action applies only to projects that include a retrofit of an existing building. If the proposed project does not include a retrofit, select "Not Applicable" in the Project Conformance column. Projects are encouraged to incorporate energy efficiency measures into the design, which can reduce carbon emissions while also reducing future operational costs through the following: 1. Incorporate strategic energy management programs to reduce building energy demands. 2. Conduct an energy audit or benchmarking analysis to identify potential energy savings opportunities and implement such opportunities. 3. Achieve CalGreen Tier 2 or voluntary building energy measures as they apply to the retrofit. 4. Reduce or eliminate the use of natural gas in place of electricity use (i.e., replace existing natural gas appliances with electric alternatives) 5. Replace existing appliances with higher-efficiency models 6. Install high-efficiency appliances/fixtures to reduce water use, and/or include water-efficient landscape design	*Describe which, if any, project consistency options from the leftmost column you are implementing.* *OR,* *Describe why this action is not applicable to your project.* *OR,* *Describe why such actions are infeasible and identify the alternative measure proposed as a replacement strategy (provide additional documentation as described below)* The proposed Project does not include a retrofit of an existing building; therefore, these efficiency measures do not apply to the Project. However, the Project would incorporate low-flow fixtures into design of the building to reduce water use, and incorporate drought-resilient landscaping.	☐ Project Complies ☑ Not Applicable ☐ Project Does Not Comply ☐ Alternative Measure Proposed

CAAP Action Consistency Requirement	Description of Project Measure(s) / Documentation of Compliance	Project Consistency
7. Participate in SoCalREN, SCE, or other energy efficiency programs 8. Conduct other energy efficiency retrofits 9. Achieve zero-net-energy **Supports CAAP Measures**: BE-4, BE-5		
Waste		
5. TIER 1: Recyclable Materials Recycling The project must comply with all state and local requirements for recycling, also including but not limited to, Chapter 8.60 Solid Waste, Recycling, and Litter Prevention and Organic Waste Disposal Reduction in the City's Municipal code. The project must also: 1. Comply with all Mandatory Construction & Demolition (C&D) Recycling Program Requirements, including Section 18.67.100. 2. Provide substantial storage, collection, and loading of recyclables in a manner that is convenient and safe for all users of the building. Ensure there are sufficient sizes and amount of collection containers for recyclables. Containers must be kept clean, be clearly labeled, and are co-located next to any other solid waste receptacles. Ensure sufficient pick up of collection containers to meet the needs of the occupants. 3. Ensure that all projects include space for multi-stream collection containers in any location where a solid waste container is traditionally housed. This includes both outdoor collection containers serviced by a waste hauler or indoor collection containers utilized by occupants. The project must provide educational material and training to occupants and tenants in how to properly separate recyclables from all other solid waste and place recyclables in a separate container designated for recycling. 4. Ensure that all project occupants and tenants separate recyclables from all other refuse and place recyclables in a separate container designated for recycling.	*Describe which project consistency options from the leftmost column you are implementing.* *OR,* *Describe why this action is not applicable to your project.* *OR,* *Describe why such actions are infeasible and identify the alternative measure proposed as a replacement strategy (provide additional documentation as described below)* The proposed Project would comply with LBMC Chapter 8.60, Solid Waste, Recycling, and Litter Prevention and Organic Waste Disposal Reduction, as well as all other applicable municipal code requirements and would therefore be consistent with this Item.	☑ Project Complies ☐ Not Applicable ☐ Project Does Not Comply ☐ Alternative Measure Proposed

CAAP Action Consistency Requirement	Description of Project Measure(s) / Documentation of Compliance	Project Consistency
5. Ensure containers are audited annually to ensure proper service levels and to check for contamination. Report findings back to occupants within 30 days and to the City as requested. 6. Work with waste hauler to provide educational material to tenants at least on an annual basis. 7. Provide compliance data to the City as required for any current auditing program. **Supports CAAP Measures:** W-1		
6. <u>TIER 1:</u> Organics Composting The project must comply with all state and local requirements for composting and organic waste collection, including but not limited to, Chapter 8.60 Solid Waste, Recycling, and Litter Prevention and Organic Waste Disposal Reduction in the City's Municipal code. The project must also: 1. Provide proper storage, collection, and loading of organics in a manner that is convenient and safe for all users of the building. Ensure there are sufficient sizes of collection containers for organics. Containers must be kept clean, be clearly labeled, and are co-located next to any other solid waste receptacles. Ensure sufficient pick up of collection containers to meet the needs of the occupants. 2. Ensure that all projects include space for multi-stream collection containers for both recycling and organics in any location where a solid waste container is traditionally housed. This includes both outdoor collection containers serviced by a waste hauler or indoor collection containers utilized by occupants. The project must provide educational material and training to occupants and tenants in how to properly separate organics from all other solid waste and place organics in a separate container designated for organics. 3. Ensure that all project occupants and tenants will separate compostables from all other refuse and place compostables in a separate container designated for composting. 4. Ensure containers are audited annually to ensure proper service levels and to check for contamination. Report findings back to occupants within 30 days and to the City as requested.	*Describe which project consistency options from the leftmost column you are implementing.* *OR,* *Describe why this action is not applicable to your project.* *OR,* *Describe why such actions are infeasible and identify the alternative measure proposed as a replacement strategy (provide additional documentation as described below)* The proposed Project would comply with LBMC Chapter 8.60, Solid Waste, Recycling, and Litter Prevention and Organic Waste Disposal Reduction, as well as all other applicable municipal code requirements and would therefore be consistent with this Item.	☑ Project Complies ☐ Not Applicable ☐ Project Does Not Comply ☐ Alternative Measure Proposed

CAAP Action Consistency Requirement	Description of Project Measure(s) / Documentation of Compliance	Project Consistency
5. Work with waste hauler to provide educational material to tenants at least on an annual basis. 6. Provide compliance data to the City as required for any current auditing program. **Supports CAAP Measures:** W-2, W-3		
7. TIER 2: Incorporate On-site Composting, Mulching, and/or Anaerobic Digestion The project may incorporate organic waste processing capabilities, such as composting, mulching, or anaerobic digestion facilities (where applicable). Collaborate with agencies to share organic processing information with interested parties. **Supports CAAP Measures:** W-4	*Describe which, if any, project consistency options from the leftmost column you are implementing.* *OR,* This Item is a voluntary measure, and the proposed Project may incorporate some of these capabilities as is feasible for the type of project being developed. *Describe why this action is not applicable to your project.* *OR,* *Describe why such actions are infeasible and identify the alternative*	☑ Project Complies ☐ Not Applicable ☐ Project Does Not Comply ☐ Alternative Measure Proposed
Transportation		
8. TIER 2: Meets Transportation Screening Criteria Does the project meet one of the following transportation screening criteria? 1. Is the project located in a Transit Priority Area or High Quality Transit Area? 2. Does the project include local-serving retail (e.g., grocery stores, pharmacies, or restaurants) less than 50,000 square feet? 3. Does the project include 100 percent affordable housing units(excluding the Manager's unit)? 4. Will the project result in less than 110 total daily vehicle trips at full buildout? If "Yes," skip checklist items #9 though #14 and proceed to checklist item #15 (*Comply with the City's Transportation Impact Guidelines*) below. If "No," proceed to checklist item #6 below. **Supports CAAP Measures:** T-1, T-2, T-3, T-5, T-6, T-7, T-8, T-9	*Describe which, if any, project consistency options from the leftmost column you are implementing.* *OR,* *Describe why this action is not applicable to your project.* *OR,* *Describe why such actions are infeasible and identify the alternative measure proposed as a replacement strategy (provide additional documentation as described below)* The Project is located within 0.5 mile of a Transit Priority Area (TPA) and 0.5 mile of a High-Quality Transit Area, as identified in Figure 1 of the City of Long Beach's SB 743 implementation document dated June 2020. Therefore, the Project meets the criteria from screening under Item 8.1 to the left.	☑ Project Complies ☐ Not Applicable ☐ Project Does Not Comply ☐ Alternative Measure Proposed

CAAP Action Consistency Requirement	Description of Project Measure(s) / Documentation of Compliance	Project Consistency
9. <u>TIER 1:</u> Trip Reduction Features to Reduce Vehicle Miles Traveled The project must incorporate vehicle trip reduction features into the project design or as mitigation measures. These features must achieve a minimum five percent reduction in vehicle trips and VMT as compared to the project without such vehicle trip reduction features, as estimated through practices backed by substantial evidence with cited reduction potential in the TIA guidelines Appendix A. This can be achieved through the implementation of a project-specific TDM Plan (see checklist item #13), offering transit subsidies, incorporating pedestrian and bicycle infrastructure (see checklist items #10 and #11), implementing parking restrictions or pricing, or including other features and measures to reduce vehicle trips. **Supports CAAP Measures:** T-1	*Describe which project consistency options from the leftmost column you are implementing.* *OR,* *Describe why this action is not applicable to your project.* *OR,* *Describe why such actions are infeasible and identify the alternative measure proposed as a replacement strategy (provide additional documentation as described below)*	☐ Project Complies ☑ Not Applicable ☐ Project Does Not Comply ☐ Alternative Measure Proposed Not applicable per Item 8 response.
10. <u>TIER 1:</u> Incorporate Pedestrian Infrastructure The project must incorporate pedestrian infrastructure into its design: 1. Pedestrian facilities and connections to public transportation consistent with the City's Mobility Element, CX3 Pedestrian Plan, and any other relevant governing plan 2. Increase sidewalk coverage to improve pedestrian access 3. Improve degraded or substandard sidewalks 4. Maximize shade for pedestrians through tree planting and maintenance 5. Incorporate best practices to ensure pedestrian infrastructure is contiguous and links externally with existing and planned pedestrian facilities; best practices include high-visibility crosswalks, pedestrian hybrid beacons, and other pedestrian signals, mid-block crossing walks, pedestrian refuge islands, speed tables, bulb-outs (curb extensions), curb ramps, signage, pavement markings, pedestrian-only connections and districts, landscaping, and other improvements to pedestrian safety 6. Minimize barriers to pedestrian access and interconnectivity, such as walls, landscaping buffers, slopes, and unprotected crossings	*Describe which project consistency options from the leftmost column you are implementing.* *OR,* *Describe why this action is not applicable to your project.* *OR,* *Describe why such actions are infeasible and identify the alternative measure proposed as a replacement strategy (provide additional documentation as described below)*	☐ Project Complies ☑ Not Applicable ☐ Project Does Not Comply ☐ Alternative Measure Proposed Not applicable per Item 8 response.

CAAP Action Consistency Requirement	Description of Project Measure(s) / Documentation of Compliance	Project Consistency
Supports CAAP Measures: T-2		
11. <u>TIER 1:</u> Incorporate Bicycle Infrastructure The project must incorporate bicycle infrastructure into its design: 1. Bicycle facilities for new and expanded buildings, new dwelling units, change of occupancy, increased of use intensity, and added off-street vehicle parking spaces 2. Provide short and long-term (secure) bicycle parking for at least 5% of motorized vehicle capacity and nothing less than CalGREEN requirements, whichever is more restrictive 3. Bicycle facilities consistent with the City's Bicycle Master Plan, Urban Design Element, and meet or exceed minimum standards for bicycle facilities in the Zoning Code and CALGreen **Supports CAAP Measures:** T-3	*Describe which project consistency options from the leftmost column you are implementing.* *OR,* *Describe why this action is not applicable to your project.* *OR,* *Describe why such actions are infeasible and identify the alternative measure proposed as a replacement strategy (provide additional documentation as described below)* Not applicable per Item 8 response.	☐ Project Complies ☑ Not Applicable ☐ Project Does Not Comply ☐ Alternative Measure Proposed
12. <u>TIER 1:</u> Incorporate Electric Vehicle Charging Infrastructure The project must comply with any CalGREEN requirement, City ordinance, building code, or condition of approval that requires a certain amount of EV charging infrastructure and readiness. This may include minimum requirements for EV charging stations, EV-capable parking spaces, and EV-ready parking spaces. **Supports CAAP Measures:** T-5	*Describe which project consistency options from the leftmost column you are implementing.* Not applicable per Item 8 response. *OR,* *Describe why this action is not applicable to your project.* *OR,* *Describe why such actions are infeasible and identify the alternative measure proposed as a replacement strategy (provide additional documentation as described below)*	☐ Project Complies ☑ Not Applicable ☐ Project Does Not Comply ☐ Alternative Measure Proposed
13. <u>TIER 1:</u> Comply with City TDM Ordinance The Project must comply with the City's TDM ordinance at the time of project approval. This may include preferential carpool/vanpool parking, bicycle parking, and shower facilities and locker rooms; trip reduction plans; transit-supportive infrastructure development; and similar strategies. Comply with any applicable VMT reduction target and incorporate any required monitoring mechanisms for development, subject to the ordinance. **Supports CAAP Measures:** T-7	*Describe which project consistency options from the leftmost column you are implementing.* Not applicable per Item 8 response. *OR,* *Describe why this action is not applicable to your project.* *OR,* *Describe why such actions are infeasible and identify the alternative measure proposed as a replacement strategy (provide additional documentation as described below)*	☐ Project Complies ☑ Not Applicable ☐ Project Does Not Comply ☐ Alternative Measure Proposed
14. <u>TIER 1:</u> Comply with the City's Transportation Impact Guidelines	*Describe which project consistency options from the leftmost column you are implementing.*	☐ Project Complies

CAAP Action Consistency Requirement	Description of Project Measure(s) / Documentation of Compliance	Project Consistency
The project must comply with the City's current Transportation Impact (TIA) Guidelines. Projects may screen out if they meet certain criteria, such as being located in a transit priority area or local-serving retail development less than 50,000 square feet. For projects which don't screen out must meet the VMT efficiency metrics identified by the TIA Guidelines (e.g., 11.8 daily VMT per capita for residential projects and 18.0 daily VMT per capita for office projects). **Supports CAAP Measures:** T-9	*OR,* *Describe why this action is not applicable to your project.* Not applicable per Item 8 response. *OR,* *Describe why such actions are infeasible and identify the alternative measure proposed as a replacement strategy (provide additional documentation as described below)*	☑ Not Applicable ☐ Project Does Not Comply ☐ Alternative Measure Proposed
15. <u>TIER 2:</u> High-Density, Mixed-Use, Transit-Oriented, Walkable Infill Project Design Projects should maximize the following characteristics whenever feasible: 1. Located in a transit priority area or transit corridor 2. Includes local-serving retail (e.g., grocery stores, pharmacies, or restaurants) 3. Includes 100 percent affordable housing units or an otherwise high level of affordable housing as defined by the City for the project site 4. Includes a mix of land uses 5. Includes shared and reduced parking strategies, such as shared parking facilities, carpool/vanpool-only spaces, shuttle facilities, EV-only spaces, and reduced parking below allowable amount 6. Does not provide more parking than required **Supports CAAP Measures:** T-6, T-8	*Describe which, if any, project consistency options from the leftmost column you are implementing.* *OR,* *Describe why this action is not applicable to your project.* *OR,* *Describe why such actions are infeasible and identify the alternative measure proposed as a replacement strategy (provide additional documentation as described below)* The Project is located within 0.5 mile of a Transit Priority Area (TPA) and 0.5 mile of a High-Quality Transit Area, as identified in Figure 1 of the City of Long Beach's SB 743 implementation document dated June 2020. Additionally, the Project would incorporate shared and reduced parking strategies, including but not limited to providing EV-only parking spaces and not providing more parking than required. Therefore, the Project meets the criteria from screening under Item 15 to the left.	☑ Project Complies ☐ Not Applicable ☐ Project Does Not Comply ☐ Alternative Measure Proposed

SOURCE: Attachment A, *Climate Action + Adaptation Plan Consistency Review Checklist: Technical Support Documentation.*

TABLE 2
STEP 4: CAAP GREENHOUSE GAS REPLACEMENT MEASURES

Description of Proposed Alternative / Replacement Measure	Description of GHG Reduction Estimate	Proposed Measure Implementation
Replacement for CAAP Consistency Requirement #: *[Number]* **Emissions Sector:** *[Building energy, transportation, waste, or other sector]* **Measure Description:** *[Describe the proposed project measure and why it is proposed]* **Supports CAAP Measures:** *[CAAP Measure(s)]*	*[Demonstrate the effectiveness of the proposed measure to reduce the project's GHG emissions.* *Include a description of how your measure will reduce emissions and provide supporting quantification documentation and assumptions. The GHG emission reduction analysis must be consistent with all CEQA guidelines and standard practice for modeling GHG emissions for new development measures and actions.]*	☐ Part of Design ☐ Additional Measure
Replacement for CAAP Consistency Requirement #: *[Number]* **Emissions Sector:** *[Building energy, transportation, waste, or other sector]* **Measure Description:** *[Describe the proposed project measure and why it is proposed]* **Supports CAAP Measures:** *[CAAP Measure(s)]*	*[Demonstrate the effectiveness of the proposed measure to reduce the project's GHG emissions.* *Include a description of how your measure will reduce emissions and provide supporting quantification documentation and assumptions. The GHG emission reduction analysis must be consistent with all CEQA guidelines and standard practice for modeling GHG emissions for new development measures and actions.]*	☐ Part of Design ☐ Additional Measure
Replacement for CAAP Consistency Requirement #: *[Number]* **Emissions Sector:** *[Building energy, transportation, waste, or other sector]* **Measure Description:** *[Describe the proposed project measure and why it is proposed]* **Supports CAAP Measures:** *[CAAP Measure(s)]*	*[Demonstrate the effectiveness of the proposed measure to reduce the project's GHG emissions.* *Include a description of how your measure will reduce emissions and provide supporting quantification documentation and assumptions. The GHG emission reduction analysis must be consistent with all CEQA guidelines and standard practice for modeling GHG emissions for new development measures and actions.]*	☐ Part of Design ☐ Additional Measure
Replacement for CAAP Consistency Requirement #: *[Number]* **Emissions Sector:** *[Building energy, transportation, waste, or other sector]* **Measure Description:** *[Describe the proposed project measure and why it is proposed]* **Supports CAAP Measures:** *[CAAP Measure(s)]*	*[Demonstrate the effectiveness of the proposed measure to reduce the project's GHG emissions.* *Include a description of how your measure will reduce emissions and provide supporting quantification documentation and assumptions. The GHG emission reduction analysis must be consistent with all CEQA guidelines and standard practice for modeling GHG emissions for new development measures and actions.]*	☐ Part of Design ☐ Additional Measure
Replacement for CAAP Consistency Requirement #: *[Number]* **Emissions Sector:** *[Building energy, transportation, waste, or other sector]*	*[Demonstrate the effectiveness of the proposed measure to reduce the project's GHG emissions.* *Include a description of how your measure will reduce emissions and provide supporting quantification documentation and assumptions. The GHG*	☐ Part of Design ☐ Additional Measure

Measure Description: *[Describe the proposed project measure and why it is proposed]* **Supports CAAP Measures:** *[CAAP Measure(s)]*	*emission reduction analysis must be consistent with all CEQA guidelines and standard practice for modeling GHG emissions for new development measures and actions.]*	
Replacement for CAAP Consistency Requirement #: *[Number]* **Emissions Sector:** *[Building energy, transportation, waste, or other sector]* **Measure Description:** *[Describe the proposed project measure and why it is proposed]* **Supports CAAP Measures:** *[CAAP Measure(s)]*	*[Demonstrate the effectiveness of the proposed measure to reduce the project's GHG emissions.* *Include a description of how your measure will reduce emissions and provide supporting quantification documentation and assumptions. The GHG emission reduction analysis must be consistent with all CEQA guidelines and standard practice for modeling GHG emissions for new development measures and actions.]*	☐ Part of Design ☐ Additional Measure

SOURCE: SOURCE: Attachment A, *Climate Action + Adaptation Plan Consistency Review Checklist: Technical Support Documentation.*

TABLE 3
STEP 5: CAAP ADAPTATION ACTION CONSISTENCY CHECKLIST

CAAP Adaptation Action Consistency Requirement	Description of Project Measure(s) / Documentation of Compliance	Project Consistency
Extreme Heat		
1. Incorporate Cool Roofs, Cool Walls, Reflective Streets, Cool Surfaces, and Shade Canopies The project incorporates the following features into its design, but not less than the California Energy Code: 1. Cool roofs and/or walls in place of dark roofs and/or conventional walls 2. Cool pavements and reflective street materials 3. Shade canopy installations 4. Other heat island mitigation design features **Supports CAAP Measures:** EH-1, EH-2	*Describe which, if any, project consistency options from the leftmost column you are implementing.* The roof of the proposed building would be copper clad and the building exterior would be treated with a white exterior insulation finish system (stucco). Prior to Building Permit issuance, the City of Long Beach Building Division would review and verify that the proposed Project site plans demonstrate compliance with the current Building Energy Efficiency Standards. The proposed Project would also be required to comply with CALGreen, which establishes planning and design standards for sustainable site development, energy efficiency (more than CEC requirements), water conservation, material conservation, and internal air contaminants.	☑ Project Complies ☐ Not Applicable ☐ Project Does Not Comply
2. Incorporate Tree Plantings and Expands Urban Forest Cover The project enhances and expands urban forest cover and vegetation by planting trees and other vegetation. All trees and vegetation planted must be drought-tolerant or California native trees & plants. **Supports CAAP Measures:** EH-3	*Describe which, if any, project consistency options from the leftmost column you are implementing.* The existing Project site is a vacant lot, and the proposed Project would include ornamental trees, shrubs, and other drought-tolerant and California native plants, consistent with the requirements of the City's Municipal Code Chapter 21.42, Landscaping Standards.	☑ Project Complies ☐ Not Applicable ☐ Project Does Not Comply
3. Incorporate Bus Shelter Amenities For any project that includes the installation of a new bus shelter, the project must include bus shelter amenities such as shade structures. **Supports CAAP Measures:** EH-7	*Describe why this action is not applicable to your project.* The proposed Project would not include installation of a new bus shelter.	☐ Project Complies ☑ Not Applicable ☐ Project Does Not Comply

Air Quality		
4. Install Photocatalytic Tiles The project includes the installation of photocatalytic tiles on outdoor surfaces, particularly in areas of the City with the poorest air quality. **Supports CAAP Measures:** AQ-1	*Describe which, if any, project consistency options from the leftmost column you are implementing.* Prior to Building Permit issuance, the City of Long Beach Building Division would review and verify that the proposed Project site plans demonstrate compliance with the current Building Energy Efficiency Standards. Photocatalytic tiles may be implemented as feasible following coordination with the City.	☑ Project Complies ☐ Not Applicable ☐ Project Does Not Comply
5. Include Urban Agriculture The project includes urban agriculture in the form of community or private gardens. **Supports CAAP Measures:** AQ-2	*Describe why this action is not applicable to your project.* *OR,* *Describe why such actions are infeasible and identify the alternative measure proposed as a replacement strategy (provide additional documentation as described below)* The proposed Project would include commercial uses on private property with liability concerns relating to public access.	☐ Project Complies ☑ Not Applicable ☐ Project Does Not Comply
6. Use Electric Lawn and Garden Equipment, Outdoor Power Equipment, and Other Small Equipment The project prohibits the use of gasoline-powered small equipment, including lawn and garden equipment and outdoor power equipment, for all tenants and owners. The project provides educational materials to tenants regarding the SCAQMD Electric Lawn and Garden Equipment Incentive and Exchange Program, Commercial Lawn & Garden Battery Buy-Down Rebate Program, and Residential Lawn Mower Rebate Program as well as the new requirements of AB1346. This requirement must be stipulated in the contract specifications for the project's future tenants and any landscaping contracts for the property or tenants. **Supports CAAP Measures:** AQ-4	*Describe which, if any, project consistency options from the leftmost column you are implementing.* *OR,* *Describe why this action is not applicable to your project.* *OR,* *Describe why such actions are infeasible and identify the alternative measure proposed as a replacement strategy (provide additional documentation as described below)* The project would stipulate the required use of electric lawn and garden equipment and outdoor power equipment and information regarding the new AB 1346 requirements to the future tenant.	☑ Project Complies ☐ Not Applicable ☐ Project Does Not Comply
Drought		
7. Implement Water Use Efficiency and Water Conservation	*Describe which, if any, project consistency options from the leftmost column you are implementing.*	☑ Project Complies

The project incorporates water use efficiency and conservation measures, including: 1. CalGreen Tier 1 and Tier 2 voluntary water conservation measures 2. Low-flow or high-efficiency water fixtures 3. Water-efficient landscapes with lower water demands than required by the DWR 2015 Model Water Efficient Landscape Ordinance (MWELO) 4. Drought-tolerant and native plant species only 5. Other applicable strategies to reduce water use **Supports CAAP Measures:** DRT-1	Project landscaping would be consistent with the requirements of the City's Municipal Code Chapter 21.42, Landscaping Standards, which includes provisions for drought tolerant and native plant materials, and would therefore implement water use and conservation measures 3 and 4. Furthermore, low-flow or high efficiency water fixtures would be incorporated into the Project design to reduce water use.	☐ Not Applicable ☐ Project Does Not Comply
8. Incorporate Green Infrastructure and Green Streets The project shall incorporate green infrastructure such as permeable pavement, bioretention areas, bioswales, or vegetated strips. **Supports CAAP Measures:** DRT-3	*Describe which, if any, project consistency options from the leftmost column you are implementing.* The proposed vegetation includes various trees, shrubs, and other ground cover vegetation along the building periphery and along the Project site boundaries. The proposed Project's open space/landscaping would represent approximately 20 percent of the proposed Project site.	☑ Project Complies ☐ Not Applicable ☐ Project Does Not Comply
9. Use Recycled Water and Greywater for Non-Potable Uses; includes Rainfall Capture The project uses recycled water and/or greywater for non-potable uses and incorporates water reuse strategies onsite, such as rainfall capture systems. The project would: 1. Require use of reclaimed / recycled water and/or grey water for outdoor uses 2. Install residential greywater systems that meet appropriate regulatory standards 3. Install rainfall capture systems 4. Install dual plumbing for the use of recycled water **Supports CAAP Measures:** DRT-4, DRT-5	*Describe which, if any, project consistency options from the leftmost column you are implementing.* Currently, reclaim water systems are not proposed as part of the building design. The Applicant will work with the City to incorporate the use of reclaimed water and/or grey water for outdoor uses (i.e., watering the proposed drought-resilient landscaping at the Project site), as feasible. *Describe why this action is not applicable to your project.* *OR,* *Describe why such actions are infeasible and identify the alternative measure proposed as a replacement strategy (provide additional documentation as described below)*	☑ Project Complies ☐ Not Applicable ☐ Project Does Not Comply

Sea Level Rise and Flooding		
10. Comply with all City Floodplain and Sea Level Rise Regulations The project complies with all City and FEMA floodplain regulations as necessary to limit, elevate, or provide floodproofing standards in areas designated as vulnerable to flooding in order to minimize physical damage to development. This includes compliance with all applicable FEMA, California Building Code, City Building Code Chapter 18.40 and Floodplain Ordinance requirements. The project also complies with all applicable sea level rise regulations and ordinances, such as the Local Coastal Program. The project applicant must notify all residents, tenants, and occupants if the project is located on a FEMA floodplain map and a sea level rise inundation map and shall provide these maps to residents, tenants, and occupants. **Supports CAAP Measures:** FLD-1, FLD-2	*Describe which, if any, project consistency options from the leftmost column you are implementing.* *OR,* The Project site located within an area of minimal flood hazard as identified by FEMA, and is not within the City's sea level rise vulnerability zone as identified in the City's Climate Change Vulnerability Assessment (2018) The proposed Project would comply with all applicable FEMA floodplain regulations, California Building Code, City Building Code Chapter 18.40 Floodplain Ordinance requirements, and applicable sea level rise requirements.	☑ Project Complies ☐ Not Applicable ☐ Project Does Not Comply
11. Comply with the City's Current Stormwater Management Plan The project must comply with the City's Current Stormwater Management Plan and all related ordinances related to stormwater management and sea level rise scenarios evaluated by the City. **Supports CAAP Measures:** FLD-5	*Describe which, if any, project consistency options from the leftmost column you are implementing.* The proposed Project would comply with the City's Current Stormwater Management Plan and all related ordinances related to stormwater management and sea level rise scenarios.	☑ Project Complies ☐ Not Applicable ☐ Project Does Not Comply
12. Ensure that all critical infrastructure in the sea level rise vulnerability zone is elevated, relocated, or floodproofed. For any project related infrastructure or infrastructure improvements, the project must sufficiently elevate, relocate, or install sufficient floodproofing techniques for all critical infrastructure in the City's sea level rise vulnerability zone pursuant to all City requirements. The project uses floodproofing techniques as necessary. **Supports CAAP Measures:** FLD-10	*Describe which, if any, project consistency options from the leftmost column you are implementing.* *OR,* *Describe why this action is not applicable to your project.* *OR,* The Project site is not located in the City's sea level rise vulnerability zone.	☐ Project Complies ☑ Not Applicable ☐ Project Does Not Comply
13. Adapt Street Hardscapes and Waterfront Streets and Paths	*Describe which, if any, project consistency options from the leftmost column you are implementing.* The Project site is not located in the City's sea level rise vulnerability zone and does not propose any street improvements.	☐ Project Complies ☑ Not Applicable

For any project related street improvements within the SLR vulnerability zone, the project must consider elevating and extending street hardscapes such as curbs to eliminate gaps that could become flood pathways, including those identified in the CAAP. **Supports CAAP Measures:** FLD-14, FLD-15	*OR,* *Describe why this action is not applicable to your project.* *OR,* *Describe why such actions are infeasible and identify the alternative measure proposed as a replacement strategy (provide additional documentation as described below)*	☐ Project Does Not Comply

SOURCE: Attachment A, *Climate Action + Adaptation Plan Consistency Review Checklist: Technical Support Documentation*.

Attachment 1

Project Consistency with City of Long Beach General Plan Land Use Element

CAAP Checklist:
Project Consistency with the City of Long Beach General Plan Land Use Element

Step 1 of the CAAP Checklist consistency evaluation seeks to establish whether the proposed Project is consistent with the City's 2019 General Plan Land Use Element and the underlying assumptions related to population growth. The proposed Project consists of a 12,469 square-foot office/bank building. The General Plan land use designation for the Project site is CC. The CC land use designation is intended to serve automobile oriented commercial goods and services in buildings no higher than five stories or 60 feet. The Project proposes a two-story office building and is consistent with the intended uses of the CC land use designation and would not require a change in zoning. The Project building's FAR (floor area ratio) is 0.34, which is under maximum FAR (1.0) designated for the CC land use designation.

The proposed Project does not include new housing that would result in population growth. Once operational, the proposed building would employ approximately 24 people and would serve varying numbers of bank customers. Based on Project plans, the building would have a maximum capacity of approximately 60 to 80 people at one time. It is assumed that these people would be drawn from the surrounding community.[1] Both the proposed building and the number of employees and visitors it would support would not be inconsistent with the CAAP's forecasts. The proposed Project would be unlikely to produce new population growth, and it would be consistent with the Land Use Element of the 2019 General Plan.

[1] The City of Long Beach's Traffic Impact Analysis Guidelines assumes that retail development that is 50,000 SF or less is likely to be local serving and tends to shorten trips within Long Beach. See Traffic Impact Analysis Guidelines, Section 2.2.4, June 2020.