Harris & Associates

GREENHOUSE GAS EMISSIONS TECHNICAL MEMORANDUM

To: Megan Hamilton, Senior Planner, San Diego Unified Port District
From: Sharon Toland, Senior Technical Specialist, Harris & Associates
RE: **Analysis of Greenhouse Gas Emissions Impacts for the East Harbor Island Redevelopment/Topgolf and Waterfront Park Project**
Date: April 29, 2026
CC: Ryan Binns, Vice President, and Kelsey Hawkins, Project Manager, Harris & Associates
Att: 1, CalEEMod Results; 2, Waterside Emissions Calculations

Introduction

This memorandum presents the results of Harris & Associates' analysis of the potential impacts to greenhouse gas (GHG) emissions from implementation of the East Harbor Island Redevelopment/Topgolf and Waterfront Park Project (Project). The Project would redevelop portions of East Harbor Island. The Project area is approximately 38 acres of land generally bounded to the north by North Harbor Drive, to the west by Harbor Island Drive, to the south by Liberator Way and the Harbor Island East Basin portion of San Diego Bay, and to the east by the Convair Lagoon portion of San Diego Bay. A portion of the Project area is planned for redevelopment (East Harbor Island redevelopment area). Currently, the Project area is occupied by the San Diego Harbor Police headquarters; The Hertz Corporation, Enterprise Mobility (operated by National Car Rental), and Avis Rent A Car System, LLC, rental car facilities; and San Diego International Airport temporary construction staging facilities. Existing structures include several one- and two-story buildings, various shade structures, surface parking lots, fencing, and limited ornamental vegetation. Topographically, the East Harbor Island redevelopment area is relatively level with a gentle gradient down to San Diego Bay.

Project components include demolition and removal of existing structures and improvements, realignment of Liberator Way, redevelopment of approximately 9.8 acres for the Topgolf visitor-serving attraction, and development of a new waterfront park and promenade. The existing San Diego Harbor Police headquarters on the western side of East Harbor Island would remain in place. A Port Master Plan Amendment would be required to add the Project to the Port Master Plan's Project List for Planning District 2 per Section 30711 of the California Coastal Act and to change the land use designation of the Project area from Industrial Business Park, Open Space, and Harbor Services to Commercial Recreation, Park/Plaza, Street, and Specialized Berthing.

This analysis focuses on the potential significance of the net increase in GHG emissions attributable to the Project components for which Project-level detail is currently available. The addition of the Topgolf visitor-serving attraction, park, realignment of Liberator Way, and associated vehicle traffic within East Harbor Island are addressed below. Future redevelopment of adjacent parcels is not included in this Project-level analysis.

Greenhouse Gas Analysis Background

A GHG is any gas that absorbs infrared radiation and traps heat in the atmosphere. GHGs are produced from natural processes and human activities. The accumulation of GHGs in the atmosphere influences the long-term atmospheric temperatures and contributes to global climate change. Carbon dioxide (CO_2)

accounts for the largest amount of GHG emissions, and collectively, CO_2, methane (CH_4), and nitrous oxide (N_2O) amount to approximately 97 percent of total GHG emissions in the United States (USEPA 2024).

For each GHG, a global warming potential has been calculated to reflect how long emissions remain in the atmosphere and how strongly each GHG absorbs energy on a per-kilogram basis relative to CO_2. For example, 1 pound of CH_4 has 25 times more heat-capturing potential than 1 pound of CO_2. To simplify reporting and analysis, GHG emissions are typically reported in metric tons of carbon dioxide equivalent (MT CO_2e). Global warming potential is a metric that indicates the relative climate forcing of 1 kilogram of emissions when averaged over the period of interest. Table 1, Global Warming Potential for Select Greenhouse Gases, identifies the CO_2e and atmospheric lifetimes of basic GHGs.

Table 1. Global Warming Potential for Select Greenhouse Gases

Pollutant	Atmospheric Lifetime (years)	Global Warming Potential (100-year)[b]
CH_4	12	25
CO_2	~100[a]	1
N_2O	121	298

Source: CAPCOA 2022.
Notes: CH_4 = methane; CO_2 = carbon dioxide; N_2O = nitrous oxide
[a] CO_2 has a variable atmospheric lifetime and cannot be readily approximated as a single number.
[b] The warming effects over a 100-year period relative to other GHGs.

Regulatory Setting

State

California has enacted various legislation related to climate change, much of which has set aggressive goals for GHG emissions reductions throughout the state. Executive Order S-03-05 (2005) established the goal of reducing GHG emissions to 2000 levels by 2010, 1990 levels by 2020, and 80 percent below 1990 levels by 2050. In September 2006, Governor Arnold Schwarzenegger signed California's Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32), requiring the California Air Resources Board to establish a statewide GHG emissions cap for 2020 based on 1990 emissions and to adopt mandatory reporting rules for significant sources of GHG emissions. In April 2015, Governor Jerry Brown signed Executive Order B-30-15, which established the goal of reducing GHG emissions to 40 percent below 1990 levels by 2030. This goal was set into law in Senate Bill 32. AB 1279, the California Climate Crisis Act, enacted in September 2022, updated the goals of AB 32. The bill established a statewide goal to achieve net-zero GHG emissions by 2045 and to achieve and maintain net-negative GHG emissions thereafter. Additionally, the bill established a specific target for statewide anthropogenic GHG emissions to be reduced to at least 85 percent below 1990 levels by 2045.

Local

The San Diego Unified Port District (District) adopted a Climate Action Plan (CAP) in 2013 (San Diego Unified Port District 2013). The CAP represents a roadmap by which the District can reduce its contributions of GHG emissions, including a targeted set of GHG emissions reduction policies and measures in support of the state's efforts under Senate Bill 32. A GHG emissions inventory was completed using a 2006 baseline year to identify existing emissions sources and the magnitude of their emissions. The results of the inventory indicated that, in 2006, activities in the District resulted in approximately 826,429 MT CO_2e. On-road transportation represents the largest single source of emissions in the District at approximately 38 percent of the 2006 inventory. The CAP establishes a goal of reducing emissions by 25 percent less than the 2006 baseline levels by 2035. It has not been updated to reflect the state GHG reduction goal to achieve net-zero GHG emissions by 2045, which was adopted after completion of the CAP. The District later completed an inventory for 2016 calendar year conditions and showed GHG emissions decreased by 18 percent from the 2006 baseline inventory, which is an additional 8 percent reduction from their initial goal of 10 percent reduction (District 2023).

Significance Thresholds

The District's CAP is not a "qualified GHG reduction plan" that may be used to streamline project-specific GHG impact analysis in in accordance with the California Environmental Quality Act (CEQA) Guidelines, Section 15183.5. Additionally, the San Diego County Air Pollution Control District has not adopted a numeric GHG threshold. Neighboring cities, including the City of San Diego, have adopted qualified CAPs. However, these CAPs do not include District operations in their inventories and forecasts and, therefore, cannot be applied to the Project.

California Air Resources Board's 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) outlines a statewide path to achieving the net-zero statewide emissions goal of AB 1279. In the absence of an adopted local plan, the 2022 Scoping Plan has been determined to be the appropriate tool to determine the significance of Project GHG emissions. The Project would result in a potentially significant impact related to GHG emissions if it was inconsistent with the 2022 Scoping Plan, specifically with the priority action area GHG reduction strategies outlined in Scoping Plan Appendix D. The 2022 Scoping Plan does not outline any requirements for individual projects. However, Appendix D includes guidance on priority strategies for GHG reduction that demonstrate alignment with state climate goals. As stated in Appendix D, the priority GHG reduction strategies "represent the core strategies that most jurisdictions in California can adopt and implement to reduce GHG emissions regardless of whether they have developed a GHG inventory or a CAP. If adopted at a sufficient scale, these strategies will address the majority of emissions under local authority in most jurisdictions" (CARB 2022). As such, a project that is consistent with the priority strategies is considered consistent with state GHG reduction goals. Additionally, although the District's CAP is not qualified to determine the significance of GHG emissions, it is an applicable plan to reduce GHGs, and the Project is also evaluated for CAP consistency.

Project Emissions Inventory

An inventory of Project GHG emissions is provided below for informational purposes.

Construction

Project construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), Version 2022.1.1.26. Construction schedule, anticipated construction fleet, and material import and export quantities were provided by the District and Topgolf. Construction is anticipated to begin in early 2025 and last approximately 28 months. Construction would include demolition of the existing car rental facilities, the existing Liberator Way, and San Diego International Airport temporary construction staging facilities, construction of the Topgolf visitor-serving attraction and park improvements, including shoreline improvements, paving associated with new parking facilities, and the Liberator Way realignment. Detailed assumptions and modeling datasheets are provided in Attachment 1, CalEEMod Results. Shoreline improvements may require using a tugboat to position a barge at the beginning of construction and to remove the barge at the end of construction. Approximately 3 hours total of tugboat operation would be required. Emissions from the tugboat operation were estimated based on the data, formulas, and emissions factors provided through the Port of San Diego 2016 Maritime Air Emissions Inventory (San Diego Unified Port District 2018). See Attachment 2, Waterside Emissions Calculations. Construction is estimated to result in maximum annual construction emissions of 5,311 MT CO_2e per year between 2025 and 2027. Table 2, Estimated Project-Related Construction Greenhouse Gas Emissions, provides estimated annual construction emissions for each construction year.

Table 2. Estimated Project-Related Construction Greenhouse Gas Emissions

Year (Construction Activities)	On-Site Equipment Emissions (MT CO_2e)	Off-Site Vehicle and Truck Emissions (MT CO_2e)	Tugboat Emissions (MT CO_2e)	Total Annual Emissions (MT CO_2e)
2025 (Demolition, Site Preparation, Grading, Building Construction, Paving)	2,597	2,713	1	5,311
2026 (Grading, Building Construction)	1,657	2,153	0	3,810
2027 (Building Construction)	403	560	1	965

Source: CalEEMod, Version 2022.1.1.26. Refer to Attachment 1 for model output.
Notes: MT CO_2e = metric tons of carbon dioxide equivalent

Operation

Operation emissions were also estimated using CalEEMod. During operation, the Project would result in area and indirect emissions from electricity and natural gas consumption, water and wastewater transport, and solid waste generation. GHG emissions from electricity consumed on site by the Project would be generated off site by fuel combustion at the electricity provider. The District and Topgolf provided estimated future building energy use. Electricity use from proposed electric vehicle (EV) charging stations and outdoor heaters was estimated based on use at existing Topgolf facilities and utilization data from the California Energy Commission. GHG emissions from water and wastewater transport would be indirect emissions resulting from the energy required to transport water from its source and the energy required to treat wastewater and transport it to its treated discharge point. Development would also generate mobile source emissions from motor vehicle trips. Project vehicle trip data was provided by CR Associates (CRA) (2024a, 2024b). GHG emissions from existing land uses are based on CalEEMod default assumptions for commercial office use, except energy use estimated using existing utility bills provided by the District and existing vehicle trip data from CRA (2024a, 2024b). Operational GHG emissions associated with the Project are shown in Table 3, Estimated Project-Related Operation Greenhouse Gas Emissions.

Table 3. Estimated Project-Related Operational Greenhouse Gas Emissions

Emissions Source	Emissions (MT CO_2e)
Area and Refrigerants	18
Electricity	49
Natural Gas	383
Mobile	3,943
Waste	249
Water	7
Total Annual Operation Emissions	**4,649**

Source: CalEEMod, Version 2022.1.1.26. Refer to Attachment 1 for model output.
Notes: MT CO_2e = metric tons of carbon dioxide equivalent. Area sources include consumer products, architectural coatings, and landscaping equipment. Refrigerants are assumed to be used in air conditioning and refrigeration equipment.

Impact Analysis

Project consistency with the 2022 Scoping Plan and the District's CAP are evaluated below.

2022 Scoping Plan

The primary plan for determining the significance of Project emissions in line with current state emissions reduction goals is the 2022 Scoping Plan, which outlines a path for achieving carbon neutrality in accordance with AB 1279. The 2022 Scoping Plan recommends that local governments prioritize transportation electrification, vehicle miles traveled (VMT) reduction, and building decarbonization (CARB 2022). These overall goals are discussed below, followed by a detailed comparison of the Project to key local action strategies identified in the 2022 Scoping Plan.

The Project would support transportation electrification by providing new EV charging stations per Table 5.106.5.3.1 of the California Green Building Standards. Its anticipated charging stations would regularly be available to serve multiple cars throughout the day at the Topgolf visitor-serving attraction. Public EV charging stations are currently not available on the site. As such, the Project would enhance the availability of EV charging in the surrounding Project area. In addition, a solar canopy would be constructed over Topgolf's surface parking lot, which would reduce the net increase in electricity usage from facility operations. The Project would support 2022 Scoping Plan goals to electrify transportation.

The Project would support the use of non-motorized transportation through a proposed sidewalk connection on Liberator Way from North Harbor Drive or Harbor Island Drive or from an existing multi-use pathway along North Harbor Drive. A multi-use walkway would be located within the Topgolf leasehold, providing a connection from North Harbor Drive to San Diego Bay and further promoting coastal access. However, the Project's contribution to regional VMT was evaluated in a VMT analysis prepared for the Project that compares the Project to the California Governor's Office of Planning and Research VMT guidelines (CRA 2024b). The VMT analysis determined that the proposed public park spaces would be a unique park space within San Diego Bay that would generate new vehicle trips and would potentially increase regional VMT. As a regionally serving commercial attraction, it was determined that the Topgolf visitor-serving attraction would also result in a net increase in regional VMT and result in a significant VMT impact. As such, the Project would conflict with 2022 Scoping Plan goals to reduce VMT per capita by 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045.

The 2022 Scoping Plan recognizes that a statewide transition to electrification will be a phased process over the 25-year Scoping Plan horizon. The electricity grid requires time to grow to ensure reliability, affordability, and resilience to meet increased demand, and technology and supply are not yet available to meet all energy needs currently served by natural gas. Additionally, existing natural gas infrastructure requires strategic decommissioning over time for safety considerations. The relevant target for the Project is to install electric-only appliances for new commercial projects by 2029. The Project area is currently served by natural gas, and it is anticipated that new commercial kitchen appliances may use natural gas. However, the Project is proposed to be operational prior to the 2029 commercial appliance target. As new technologies become available and local natural gas infrastructure is decommissioned, future replacement appliances would likely be electric appliances. Additionally, although regulations adapted by surrounding jurisdiction do not apply to the District, the continued use of natural gas for commercial kitchens is consistent with surrounding jurisdiction's climate action goals. The City of San Diego's Draft San Diego All-Electric Reach Code, adopted in support of the City's CAP to achieve net-zero community emissions, includes an exception for commercial kitchen use of natural gas when no all-electric alternative is commercially available (City of San Diego 2023). As such, near-term use of natural gas kitchen equipment would not conflict with 2022 Scoping Plan goals for building electrification.

As outlined in Chapter 4 of the 2022 Scoping Plan, Key Sectors, achieving carbon neutrality by 2045 would require a combination of accelerated rates of development and deployment of emerging technologies, new regulations or changes to existing ones, state incentive programs, and local action. Project operation would comply with state regulations as applicable and cannot anticipate how new technologies, regulations, or incentives will develop or be applied. Additionally, the 2022 Scoping Plan does not include any specific requirements for individual development projects. However, Appendix D, Local Actions, of the 2022

Scoping Plan outlines priority GHG reduction strategies to be implemented through local projects. These strategies are not mandates for new development; however, these strategies represent the most applicable tool for evaluating Project consistency with the 2022 Scoping Plan. Project consistency with these strategies is evaluated in Table 4, Project Consistency with Priority Greenhouse Gas Reduction Strategies and Actions. As shown in Table 4, the Project would be consistent with priority GHG reduction strategies, except for reducing regional VMT. This impact would be potentially significant.

Table 4. Project Consistency with Priority Greenhouse Gas Reduction Strategies and Actions

Priority Area	Priority GHG Reduction Strategies	Project Consistency
Transportation Electrification	Convert local government fleets to ZEVs and provide EV charging at public sites.	The Project would not include any changes to fleet vehicle operations. The San Diego Harbor Police would continue to operate with implementation of the Project. Operation may include modernization (which is outside the scope of this Project), but it is currently unknown whether modernization would include fleet vehicles. EV charging stations would be provided in the Topgolf visitor-serving attraction area in accordance with Table 5.106.5.3.1 of the California Green Building Standards. The Project would be consistent with this strategy.
	Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as building standards that exceed state building codes, permit streamlining, infrastructure siting, consumer education, preferential parking policies, and ZEV readiness plans).	The Topgolf visitor-serving attraction would include new EV infrastructure to support local EV use and would not include any components that interfere with development of a local ZEV ecosystem. The Project would be consistent with this strategy.
	Make 100 percent of light-duty vehicle sales ZEVs by 2035.	Not applicable. The Project would not include any vehicle sales or manufacturing component.
VMT Reduction	Reduce or eliminate minimum parking standards.	The Project is subject to existing parking standards. A parking analysis was prepared for the Project based on the San Diego Unified Port District Tidelands Parking Guidelines (Parking Guidelines) (CRA 2024c). The parking analysis did apply parking adjustment factors that account for the availability of transit, ride-share, and walkability from other destinations, which reduced the parking required for the Project compared to a similar facility at a different location. Therefore, the Project would be consistent with this strategy.
	Implement Complete Streets policies and investments, consistent with General Plan Circulation Element requirements.	The applicable Circulation Element for the Project is the Port Master Plan Circulation/Navigation Element. Neither this element nor the PMPU Mobility Element includes any specific Complete Streets policies. However, the elements do encourage reduced parking and prioritize pedestrian and bicycle routes. The Project would not include any components that would conflict with planned circulation systems. The Project would provide pedestrian connections to support Complete Streets, and has reduced parking compared to parking requirements. The Project would be consistent with this strategy.

Table 4. Project Consistency with Priority Greenhouse Gas Reduction Strategies and Actions

Priority Area	Priority GHG Reduction Strategies	Project Consistency
	Increase access to public transit by increasing density of development near transit, improving transit service by increasing service frequency, creating bus priority lanes, reducing or eliminating fares, micro-transit, etc.	Although this policy is directed toward agencies and not specific development projects, the site is currently accessible from nearby bus stops and light-rail service (CRA 2024c). As such, the Topgolf visitor-serving attraction would increase development density near transit by increasing the availability of Commercial Recreation facilities in the area. Existing rental car facilities would be relocated within the District's borders such that total development density would also increase. However, these bus stops do not operate during the Topgolf visitor-serving attraction's anticipated peak operating hours and would not be able to service patrons during late nighttime hours. Additionally, transit stops are relatively spread out in the area, and are not easily accessible from the Project area. **The Project would be inconsistent with this strategy.**
	Increase public access to clean mobility options by planning for and investing in electric shuttles, bike share, car share, and walking.	The Project would include a new pedestrian connection to North Harbor Drive, Harbor Island Drive, or the existing multi-use pathway on North Harbor Drive. An 8- to 10-foot-wide walkway (also multi-use) would be located within the Topgolf visitor-serving attraction site, providing a connection from North Harbor Drive to San Diego Bay and further promoting coastal access. The Project would be consistent with this strategy.
	Implement parking pricing or transportation demand management pricing strategies.	The District's Tidelands Parking Guidelines are the applicable parking demand management strategies for the project. The Project is not required to include paid parking under the guidelines. However, the intent of paid parking is to encourage use of alternative forms of transportation by making parking less desirable. Consistent with this intent, as described above, the Topgolf visitor-serving attraction would include reduced parking compared to a similar-sized project through parking adjustment factors outlined in the District Parking Guidelines, and parking time limits would be imposed. The parking adjustment factors recognize the Project's proximity to transit, potential for rideshare usage, and proximity to existing development where parking is already provided. Additionally, the Project includes new pedestrian connections to encourage reduced vehicle trips. As such, the Project would not include excess parking that would encourage vehicle trips to the site, but would provide reduced parking to encourage carpooling or alternative transportation. The Project would be consistent with the intent of this strategy.

Table 4. Project Consistency with Priority Greenhouse Gas Reduction Strategies and Actions

Priority Area	Priority GHG Reduction Strategies	Project Consistency
	Amend zoning or development codes to enable mixed-use, walkable, transit-oriented, and compact infill development (such as increasing the allowable density of a neighborhood).	It is beyond the scope of the Project to amend the District zoning (land use) or development codes. The Project would not interfere with future (land use) zoning amendments to enable mixed-use and infill development. The Project would re-designate the area from Industrial Business Park to Commercial/Recreation and Park/Plaza, allowing for a mix of uses to promote activity in the area. For example, the Project proposes new public park and entertainment uses on a site that is currently used for commercial operations. Commercial Recreation uses promote walkability by encouraging new activity in a previously developed space. The Project would be consistent with this strategy.
	Preserve natural and working lands by implementing land use policies that guide development toward infill areas and do not convert "greenfield" land to urban uses (e.g., green belts, strategic conservation easements).	The Project proposes redevelopment on a site that is currently used for commercial operations. It would not result in the conversion of greenfield land to urban uses. The Project would be consistent with this strategy.
	Reduce VMT per capita by 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045.	The VMT analysis for the Project determined that the Project would result in a net increase in VMT based on guidance provided by the Governor's Office of Land Use and Climate Innovation Technical Advisory (CRA 2024b). **The Project would be inconsistent with this strategy.**
Building Decarbonization	Adopt all-electric new construction reach codes for residential and commercial uses	It is beyond the scope of the Project to adopt an all-electric code for the District. The Topgolf visitor-serving attraction would be consistent with applicable building energy standards. As described above, the site is currently served by natural gas, and continued use of natural gas by the Project does not conflict with 2022 Scoping Plan targets for commercial natural gas use. For example, the 2022 Scoping Plan includes the goal of 80 percent of commercial appliance sales to be electric by 2030, and 100 percent of appliance sales to be electric by 2045. The Project would be designed to be electric-ready to incorporate electric appliances when replacing equipment. Therefore, the Project would be consistent with the goal to reduce natural gas use in commercial buildings. The Project would be consistent with this strategy.

Table 4. Project Consistency with Priority Greenhouse Gas Reduction Strategies and Actions

Priority Area	Priority GHG Reduction Strategies	Project Consistency
	Adopt policies and incentive programs to implement energy efficiency retrofits for existing buildings, such as weatherization and lighting upgrades, and replacing energy-intensive appliances and equipment with more efficient systems (such as Energy Star-rated equipment and equipment controllers).	The Project area does not include any existing uses to be retrofitted. Existing buildings would be demolished and replaced by structures that meet current building standards. This strategy would not be applicable.
	Adopt policies and incentive programs to electrify all appliances and equipment in existing buildings such as appliance rebates, existing building reach codes, or time of sale electrification ordinances.	The Project would not interfere with implementation of policies or incentive programs. Existing buildings would be demolished and replaced with new structures that meet current building standards. This strategy would not be applicable.
	Facilitate deployment of renewable energy production and distribution and energy storage on privately owned land uses (e.g., permit streamlining, information sharing).	The Project parking lot would not be privately owned. However, the Project would include installation of solar panels on canopies over the Topgolf visitor-serving attraction surface parking lot. The Project would be consistent with this strategy.
	Deploy renewable energy production and energy storage directly in new public projects and on existing public facilities (e.g., solar photovoltaic systems on rooftops of municipal buildings and on canopies in public parking lots, battery storage systems in municipal buildings).	The Project would include installation of solar panels on canopies over the Topgolf visitor-serving attraction surface parking lot. The Project would be consistent with this strategy.
	Place all-electric appliances in new construction beginning in 2026 (residential) and 2029 (commercial). For existing residential buildings, make 80 percent of appliance sales electric by 2030 and 100 percent of appliance sales electric by 2035 (appliances replaced at end of life). For existing commercial buildings, make 80 percent of appliance sales electric by 2030 and 100 percent of appliance sales electric by 2045 (appliances replaced at end of life).	The Project would be operational prior to 2029. Future replacement appliances and equipment would be subject to electrification ordinances at the time of replacement. The Project would be consistent with this strategy.

Source: CARB 2022, Appendix D, Table 1.
Notes: EV = electric vehicle; GHG = greenhouse gas; VMT = vehicle miles traveled; ZEV = zero-emission vehicle

Port of San Diego Climate Action Plan

The District's CAP focuses on reducing ongoing annual GHG emissions from activities within the Tidelands. Project consistency with applicable CAP emissions reduction measures is evaluated in Table 5, Project Consistency with Climate Action Plan Emissions Reduction Measures.

Table 5. Project Consistency with Climate Action Plan Emissions Reduction Measures

CAP Reduction Measure	Project Consistency
TR3: Vehicle Idling. Enforce state idling laws for commercial vehicles, including delivery and construction vehicles.	The Project would comply with applicable idling laws for construction vehicles. Specifically, Section 2485 in Title 13 of the California Code of Regulations states that the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to 5 minutes at any location. The Project would be consistent with this measure.
TL1: Promote greater linkage between land uses and transit, as well as other modes of transportation. **TL2**: Increase bicycling and walking opportunities (safe infrastructure to priority destinations) as an alternative to driving.	The realignment of Liberator Way would accommodate both vehicular and pedestrian traffic. The sidewalk would provide a new connection to North Harbor Drive, Harbor Island Drive, or from an existing multi-use pathway on North Harbor Drive. An 8 to 10-foot-wide walkway (also multi-use) would be located within the Topgolf leasehold, providing a north–south connection from the Project area to San Diego Bay and further promoting coastal access. The Project would be consistent with this measure.
TV1: Implement trip reduction programs, such as: ride sharing, telecommuting and alternative work schedules, commute trip reduction marketing, and employer-sponsored vanpool/shuttle.	As discussed above, under 2022 Scoping Plan consistency, the Project would result in a significant impact to VMT. Trip reduction programs are required for impact mitigation, as discussed below. **The Project would be inconsistent with this measure prior to mitigation.**
EB6: Replace light fixtures in non-Port facilities with lower energy bulbs such as fluorescent, LEDs, or CFLs.	All Project lighting would include energy-efficient lighting in all project components. The Project would be consistent with this strategy.
EH3: Evaluate existing landscaping and options to convert reflective and impervious surfaces to landscaping, and install or replace vegetation with drought-tolerant, low-maintenance native species that can also provide shade and reduce heat island effects.	The Project would reduce impervious surfaces by including a waterfront park on a currently developed site, and would include landscaping with native species, where feasible, as well as drought-tolerant species. The Project would be consistent with this strategy.
SW1: Increase the diversion of solid waste from landfill disposal. Establish and enforce a construction waste-recycling program for all demolition and construction projects. Identify major waste generating uses and provide technical and financial support to implement waste reduction strategies, and expand public outreach and education about waste management and recycling.	Construction of the proposed Topgolf visitor-serving attraction would give preference to materials that are of high-recycled content, made through a sustainably manufactured process, or acquired through local sourcing to minimize the impact of the complex's construction on the environment. Construction of the Project would comply with CALGreen Construction Waste Management Requirements and implement a waste management program focused on recycling as much waste as possible instead of diverting to landfill disposal. The Project would be consistent with this strategy.

The CAP also includes goals for the District to adopt ordinances related to building energy efficiency (Goal EB3), cool roofs (Goal EH1), renewable energy production (Goal EA2), and water conservation (Goal WC1). Although applicable ordinances have not been adopted, the Project would be consistent with California building standards requiring water and energy efficiency, would include light-colored roofing, and would include new solar panels on parking lot canopies. Therefore, the Project would be consistent with the sustainable design goals of the CAP. However, as described in Table 5, without implementation of a trip reduction plan, the Project would be inconsistent with CAP reduction measure TV1. Therefore, this impact would be potentially significant.

Mitigation Measures

The Project would result in a significant impact related to 2022 Scoping Plan consistency because it would not contribute to a regional VMT reduction. The proposed waterfront park would generate new trips, as it would be a unique park space within San Diego Bay. This could potentially increase the travel distance for users who might come to the Project from distant parts of the San Diego region. Therefore, the proposed park has the potential to increase VMT within the region. Additionally, the Project would result in a potentially significant impact related to District CAP consistency without implementation of a trip reduction plan. The VMT Assessment for the Project has identified a Transportation Demand Management Plan, which includes five feasible transportation demand management (TDM) measures for the Project (CRA 2024b):

GHG-1: **Transportation Demand Management Plan.** The Topgolf Applicant shall implement a Transportation Demand Management Plan which shall include the following transportation demand measures:

- **T-2. Increase Job Density:** This measure accounts for the VMT reduction achieved by a project that is designed with a higher density of jobs compared to the average job density in the U.S. Increased densities affect the distance people travel and provide greater options for the mode of travel they choose. Increasing job density results in shorter and fewer trips by single-occupancy vehicles and thus a reduction in GHG emissions. Topgolf would construct a 67,030 square foot building, which equals 260 jobs per acre. The anticipated number of employees is 400.
- **T-7. Implement Commute Trip Reduction Marketing:** The Topgolf component shall identify a TDM coordinator who shall work with the San Diego Association of Governments to implement a marketing program that promotes alternative modes of transportation. The marketing program will work together with measure T-5 to promote and educate employees about their travel choices to the employment location beyond driving such as carpooling, taking transit, walking, and bicycling, thereby reducing VMT and GHG emissions. The marketing materials will include information about amenities offered by the Project such as transit subsidy, as well as event specific information such as Bike Anywhere Day, and shall be made available to employees and guests.
- **T-10. Provide End-of-Trip Bicycle Facilities:** Topgolf shall install and maintain end-of-trip facilities for employee use. End-of-trip facilities include bike parking, bike lockers, and personal lockers. The provision and maintenance of secure bike parking and related facilities encourages commuting by bicycle, thereby reducing VMT and GHG emissions.
- **T-18. Provide Pedestrian Network Improvement:** The Project includes direct and safe walking connectivity between the Project and North Harbor Drive. The aim is to create an accessible and safe pedestrian environment that encourages employees and other tenants to walk to and from the Project.
- **T-19-A. Construct or Improve Bike Facility:** The Project would construct a 20-foot promenade south of Liberator Way, which would serve as a Class I bike path and would connect to the Class I bike path south of North Harbor Drive to enhance a larger existing bikeway network. Providing bicycle infrastructure helps to improve biking conditions within an area. This encourages a mode shift on the roadway parallel to the bicycle facility from vehicles to bicycles, displacing VMT and thus reducing GHG emissions.

With implementation of Mitigation Measure GHG-1, the Project would be consistent with District CAP strategy TV1 because it would require a trip reduction program. However, the impact related to 2022 Scoping Plan consistency would be reduced but not to a less than significant level by Mitigation Measure GHG-1. The VMT Assessment determined that although the Project would provide TDM measures, implementation of the TDM Program would only reduce VMT associated with Topgolf employees and not VMT associated with patrons, who also contribute to the total actual VMT of the Project. Additionally, there are no additional feasible mitigation measures to be implemented. Implementation of the TDM

measures above are not anticipated to reduce the total VMT of the Project due to the unique characteristic of the Project's land use as a regional visitor-serving attraction. It is difficult for the Project to reduce its VMT, given that it intends to be a regional-serving facility that caters to as many visitors as possible that may come from different parts of the San Diego region to access San Diego's waterfront. In addition, California Air Pollution Control Officers Association does not provide TDM measures applicable for park/open space projects. Therefore, since Mitigation Measure GHG-1 would not reduce the Project's total VMT to less than significant levels, the Project's impact related to the 2022 Scoping Plan and District CAP consistency would also remain significant and unavoidable.

Summary

Implementation of the Project would have the potential to result in an increase in GHG emissions. With implementation of the TDM measures identified in the VMT Assessment, the Project would be consistent with the District CAP. However, the TDM measures would not reduce VMT impacts to a less than significant level, and the Project's impact related to 2022 Scoping Plan consistency would be significant and unavoidable.

References

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Attachment 1. CalEEMod Results

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(Existing) East Harbor Island Redevlopment/Topgolf Project Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	(Existing) East Harbor Island Redevlopment/Topgolf Project
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.00
Precipitation (days)	1.00
Location	32.72821136197312, -117.19150081833791
County	San Diego
City	San Diego
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6403
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.26

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
General Office Building	11.8	1000sqft	0.27	11,830	0.00	—	—	Hertz

General Office Building	9.38	1000sqft	0.22	9,379	0.00	—	—	Enterprise
General Office Building	12.1	1000sqft	0.28	12,090	0.00	—	—	Avis

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

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.	5.54	5.38	2.04	10.2	0.01	0.09	0.00	0.09	0.09	0.00	0.09	18.2	2,434	2,453	2.18	0.11	0.08	2,539
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.18	5.02	2.13	11.0	0.01	0.09	0.00	0.09	0.09	0.00	0.09	18.2	2,433	2,451	2.21	0.12	0.08	2,541
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.54	5.06	4.51	33.4	0.09	0.15	7.65	7.80	0.14	1.94	2.08	18.2	10,613	10,631	2.38	0.35	11.6	10,805
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.01	0.92	0.82	6.10	0.02	0.03	1.40	1.42	0.03	0.35	0.38	3.02	1,757	1,760	0.39	0.06	1.92	1,789

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	4.41	4.32	0.96	7.85	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	—	245	245	0.19	0.09	0.00	278
Area	1.01	0.99	0.01	1.45	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.96	5.96	< 0.005	< 0.005	—	5.98
Energy	0.12	0.06	1.07	0.90	0.01	0.08	—	0.08	0.08	—	0.08	—	2,175	2,175	0.16	0.01	—	2,181
Water	—	—	—	—	—	—	—	—	—	—	—	1.56	8.94	10.5	0.16	< 0.005	—	15.7
Waste	—	—	—	—	—	—	—	—	—	—	—	16.7	0.00	16.7	1.67	0.00	—	58.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	5.54	5.38	2.04	10.2	0.01	0.09	0.00	0.09	0.09	0.00	0.09	18.2	2,434	2,453	2.18	0.11	0.08	2,539
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.31	4.21	1.06	10.1	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	—	249	249	0.22	0.10	0.00	285
Area	0.75	0.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.12	0.06	1.07	0.90	0.01	0.08	—	0.08	0.08	—	0.08	—	2,175	2,175	0.16	0.01	—	2,181
Water	—	—	—	—	—	—	—	—	—	—	—	1.56	8.94	10.5	0.16	< 0.005	—	15.7
Waste	—	—	—	—	—	—	—	—	—	—	—	16.7	0.00	16.7	1.67	0.00	—	58.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	5.18	5.02	2.13	11.0	0.01	0.09	0.00	0.09	0.09	0.00	0.09	18.2	2,433	2,451	2.21	0.12	0.08	2,541
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.54	4.13	3.44	31.8	0.08	0.06	7.65	7.71	0.06	1.94	2.00	—	8,426	8,426	0.39	0.33	11.5	8,547
Area	0.88	0.87	0.01	0.71	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.94	2.94	< 0.005	< 0.005	—	2.95
Energy	0.12	0.06	1.07	0.90	0.01	0.08	—	0.08	0.08	—	0.08	—	2,175	2,175	0.16	0.01	—	2,181
Water	—	—	—	—	—	—	—	—	—	—	—	1.56	8.94	10.5	0.16	< 0.005	—	15.7
Waste	—	—	—	—	—	—	—	—	—	—	—	16.7	0.00	16.7	1.67	0.00	—	58.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	5.54	5.06	4.51	33.4	0.09	0.15	7.65	7.80	0.14	1.94	2.08	18.2	10,613	10,631	2.38	0.35	11.6	10,805
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.83	0.75	0.63	5.81	0.02	0.01	1.40	1.41	0.01	0.35	0.36	—	1,395	1,395	0.06	0.06	1.91	1,415
Area	0.16	0.16	< 0.005	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.49	0.49	< 0.005	< 0.005	—	0.49
Energy	0.02	0.01	0.20	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	360	360	0.03	< 0.005	—	361
Water	—	—	—	—	—	—	—	—	—	—	—	0.26	1.48	1.74	0.03	< 0.005	—	2.59
Waste	—	—	—	—	—	—	—	—	—	—	—	2.76	0.00	2.76	0.28	0.00	—	9.67
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	1.01	0.92	0.82	6.10	0.02	0.03	1.40	1.42	0.03	0.35	0.38	3.02	1,757	1,760	0.39	0.06	1.92	1,789

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	900	900	0.05	0.01	—	903
Total	—	—	—	—	—	—	—	—	—	—	—	—	900	900	0.05	0.01	—	903
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	900	900	0.05	0.01	—	903
Total	—	—	—	—	—	—	—	—	—	—	—	—	900	900	0.05	0.01	—	903
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	149	149	0.01	< 0.005	—	149
Total	—	—	—	—	—	—	—	—	—	—	—	—	149	149	0.01	< 0.005	—	149

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.12	0.06	1.07	0.90	0.01	0.08	—	0.08	0.08	—	0.08	—	1,275	1,275	0.11	< 0.005	—	1,279
Total	0.12	0.06	1.07	0.90	0.01	0.08	—	0.08	0.08	—	0.08	—	1,275	1,275	0.11	< 0.005	—	1,279
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.12	0.06	1.07	0.90	0.01	0.08	—	0.08	0.08	—	0.08	—	1,275	1,275	0.11	< 0.005	—	1,279
Total	0.12	0.06	1.07	0.90	0.01	0.08	—	0.08	0.08	—	0.08	—	1,275	1,275	0.11	< 0.005	—	1,279
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.02	0.01	0.20	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	211	211	0.02	< 0.005	—	212
Total	0.02	0.01	0.20	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	211	211	0.02	< 0.005	—	212

4.3. Area Emissions by Source

4.3.1. 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	0.71	0.71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.26	0.24	0.01	1.45	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.96	5.96	< 0.005	< 0.005	—	5.98
Total	1.01	0.99	0.01	1.45	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.96	5.96	< 0.005	< 0.005	—	5.98
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.71	0.71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.75	0.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Product	0.13	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.02	0.02	< 0.005	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.49	0.49	< 0.005	< 0.005	—	0.49
Total	0.16	0.16	< 0.005	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.49	0.49	< 0.005	< 0.005	—	0.49

4.4. Water Emissions by Land Use

4.4.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1.56	8.94	10.5	0.16	< 0.005	—	15.7
Total	—	—	—	—	—	—	—	—	—	—	—	1.56	8.94	10.5	0.16	< 0.005	—	15.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	1.56	8.94	10.5	0.16	< 0.005	—	15.7
Total	—	—	—	—	—	—	—	—	—	—	—	1.56	8.94	10.5	0.16	< 0.005	—	15.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.26	1.48	1.74	0.03	< 0.005	—	2.59
Total	—	—	—	—	—	—	—	—	—	—	—	0.26	1.48	1.74	0.03	< 0.005	—	2.59

4.5. Waste Emissions by Land Use

4.5.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	16.7	0.00	16.7	1.67	0.00	—	58.4
Total	—	—	—	—	—	—	—	—	—	—	—	16.7	0.00	16.7	1.67	0.00	—	58.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	16.7	0.00	16.7	1.67	0.00	—	58.4
Total	—	—	—	—	—	—	—	—	—	—	—	16.7	0.00	16.7	1.67	0.00	—	58.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	2.76	0.00	2.76	0.28	0.00	—	9.67
Total	—	—	—	—	—	—	—	—	—	—	—	2.76	0.00	2.76	0.28	0.00	—	9.67

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
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

5.9. 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
Total all Land Uses	1,473	1,473	1,473	384,032	—	0.00	0.00	3,955,557

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	49,949	16,650	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

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)
General Office Building	299,218	589	0.0330	0.0040	2,832,000
General Office Building	122,755	589	0.0330	0.0040	430,000
General Office Building	135,559	589	0.0330	0.0040	716,579

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)

General Office Building	762,212	0.00
General Office Building	51,612	0.00
General Office Building	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	11.0	—
General Office Building	8.72	—
General Office Building	11.2	—

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
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
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
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	7.46	annual days of extreme heat
Extreme Precipitation	2.35	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	1.26	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 (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
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	N/A	N/A	N/A	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	0	0	0	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	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 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	29.9
AQ-PM	51.3
AQ-DPM	89.9
Drinking Water	29.0
Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	43.0
Traffic	75.0
Effect Indicators	—
CleanUp Sites	97.5
Groundwater	99.0
Haz Waste Facilities/Generators	93.5
Impaired Water Bodies	66.7
Solid Waste	52.9
Sensitive Population	—
Asthma	78.7
Cardio-vascular	31.8
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	—
Unemployment	—

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	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—
Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—

Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	1.8
Asthma ER Admissions	17.6
High Blood Pressure	5.4
Cancer (excluding skin)	5.1
Asthma	61.7
Coronary Heart Disease	1.3
Chronic Obstructive Pulmonary Disease	2.1
Diagnosed Diabetes	16.2
Life Expectancy at Birth	0.0
Cognitively Disabled	0.0
Physically Disabled	0.0
Heart Attack ER Admissions	35.6
Mental Health Not Good	43.4
Chronic Kidney Disease	14.8
Obesity	45.5
Pedestrian Injuries	0.0
Physical Health Not Good	32.1
Stroke	7.6
Health Risk Behaviors	—
Binge Drinking	24.0
Current Smoker	21.4
No Leisure Time for Physical Activity	36.8
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	28.1

Children	99.4
Elderly	99.8
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	0.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	16.4
Traffic Density	0.0
Traffic Access	87.4
Other Indices	—
Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
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)	No

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	existing run
Operations: Energy Use	calculated yearly usage based on utility statements
Operations: Water and Waste Water	calculated total yearly from utility bills provided. Hertz and Avis are grouped under one row since payments for water are split
Land Use	Calculated square footage of operating buildings per Demolition plans. This does not account for canopies and storage areas.
Operations: Vehicle Data	revised per LMA

East Harbor Island Redevelopment/Topgolf Project v5 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	East Harbor Island Redevelopment/Topgolf Project v5
Construction Start Date	1/1/2025
Operational Year	2027
Lead Agency	Port of San Diego
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	20.0
Location	32.72822266045955, -117.1914293433764
County	San Diego
City	San Diego
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6403
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.29

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
High Turnover (Sit Down Restaurant)	67.0	1000sqft	1.54	67,030	80,621	—	—	—

Parking Lot	289	Space	2.60	0.00	0.00	—	—	—
City Park	10.8	Acre	10.8	0.00	401,506	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.	62.2	57.5	165	219	0.46	6.85	38.1	44.9	6.24	16.0	22.2	—	57,436	57,436	2.62	3.76	58.2	58,682
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	52.0	48.1	130	182	0.39	5.33	18.1	23.5	4.84	5.83	10.7	—	50,154	50,154	2.34	3.70	1.48	51,318
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	41.6	39.8	81.9	108	0.24	3.22	13.3	16.5	2.94	4.07	7.01	—	31,298	31,298	1.47	2.43	15.9	32,075
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.59	7.26	15.0	19.7	0.04	0.59	2.42	3.01	0.54	0.74	1.28	—	5,182	5,182	0.24	0.40	2.63	5,310

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	62.2	57.5	165	219	0.46	6.85	38.1	44.9	6.24	16.0	22.2	—	57,436	57,436	2.62	3.76	58.2	58,682
2026	46.9	43.9	95.4	149	0.31	3.91	17.4	21.4	3.41	5.65	9.06	—	40,685	40,685	1.81	3.36	48.8	41,780
2027	39.5	38.2	37.3	93.1	0.12	1.76	3.61	5.37	1.49	0.92	2.42	—	15,545	15,545	0.71	1.24	20.0	15,952
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	52.0	48.1	130	182	0.39	5.33	18.1	23.5	4.84	5.83	10.7	—	50,154	50,154	2.34	3.70	1.48	51,318
2026	46.8	43.9	96.4	148	0.31	3.91	17.4	21.4	3.41	5.65	9.06	—	40,571	40,571	1.81	3.37	1.27	41,620
2027	39.4	38.1	37.8	92.1	0.12	1.76	3.61	5.37	1.49	0.92	2.42	—	15,446	15,446	0.72	1.24	0.52	15,836
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	28.7	26.3	81.9	104	0.24	3.22	13.3	16.5	2.94	4.07	7.01	—	31,298	31,298	1.47	2.43	15.9	32,075
2026	41.6	39.8	54.8	108	0.17	2.42	7.31	9.73	2.08	2.19	4.27	—	22,421	22,421	1.02	1.85	12.6	23,011
2027	14.5	14.0	13.9	33.8	0.04	0.65	1.31	1.96	0.55	0.33	0.88	—	5,676	5,676	0.26	0.45	3.18	5,821
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	5.23	4.80	15.0	19.0	0.04	0.59	2.42	3.01	0.54	0.74	1.28	—	5,182	5,182	0.24	0.40	2.63	5,310
2026	7.59	7.26	10.00	19.7	0.03	0.44	1.33	1.78	0.38	0.40	0.78	—	3,712	3,712	0.17	0.31	2.09	3,810
2027	2.64	2.56	2.53	6.18	0.01	0.12	0.24	0.36	0.10	0.06	0.16	—	940	940	0.04	0.08	0.53	964

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.	14.1	12.8	10.5	97.2	0.25	0.33	21.4	21.7	0.32	5.43	5.75	437	27,028	27,465	45.1	0.91	180	29,043

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.4	12.2	11.3	87.1	0.24	0.32	21.4	21.7	0.31	5.43	5.74	437	25,922	26,359	45.2	0.96	107	27,880
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	13.5	12.3	11.2	88.9	0.24	0.33	21.1	21.5	0.31	5.36	5.68	437	26,093	26,531	45.2	0.95	137	28,079
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.47	2.24	2.05	16.2	0.04	0.06	3.86	3.92	0.06	0.98	1.04	72.4	4,320	4,392	7.48	0.16	22.7	4,649

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	11.6	10.5	8.55	92.7	0.24	0.18	21.4	21.6	0.17	5.43	5.60	—	24,418	24,418	0.99	0.86	74.7	24,774
Area	2.31	2.27	0.02	2.92	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	12.0	12.0	< 0.005	< 0.005	—	12.0
Energy	0.21	0.11	1.93	1.62	0.01	0.15	—	0.15	0.15	—	0.15	—	2,590	2,590	0.41	0.03	—	2,609
Water	—	—	—	—	—	—	—	—	—	—	—	6.90	7.75	14.7	0.71	0.02	—	37.7
Waste	—	—	—	—	—	—	—	—	—	—	—	430	0.00	430	43.0	0.00	—	1,506
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	105	105
Total	14.1	12.8	10.5	97.2	0.25	0.33	21.4	21.7	0.32	5.43	5.75	437	27,028	27,465	45.1	0.91	180	29,043
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.4	10.3	9.38	85.5	0.23	0.18	21.4	21.6	0.17	5.43	5.60	—	23,324	23,324	1.03	0.91	1.94	23,623
Area	1.79	1.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.21	0.11	1.93	1.62	0.01	0.15	—	0.15	0.15	—	0.15	—	2,590	2,590	0.41	0.03	—	2,609

Water	—	—	—	—	—	—	—	—	—	—	—	6.90	7.75	14.7	0.71	0.02	—	37.7
Waste	—	—	—	—	—	—	—	—	—	—	—	430	0.00	430	43.0	0.00	—	1,506
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	105	105
Total	13.4	12.2	11.3	87.1	0.24	0.32	21.4	21.7	0.31	5.43	5.74	437	25,922	26,359	45.2	0.96	107	27,880
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	11.3	10.2	9.27	85.8	0.23	0.18	21.1	21.3	0.17	5.36	5.53	—	23,490	23,490	1.02	0.90	32.3	23,816
Area	2.04	2.02	0.01	1.44	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.91	5.91	< 0.005	< 0.005	—	5.93
Energy	0.21	0.11	1.93	1.62	0.01	0.15	—	0.15	0.15	—	0.15	—	2,590	2,590	0.41	0.03	—	2,609
Water	—	—	—	—	—	—	—	—	—	—	—	6.90	7.75	14.7	0.71	0.02	—	37.7
Waste	—	—	—	—	—	—	—	—	—	—	—	430	0.00	430	43.0	0.00	—	1,506
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	105	105
Total	13.5	12.3	11.2	88.9	0.24	0.33	21.1	21.5	0.31	5.36	5.68	437	26,093	26,531	45.2	0.95	137	28,079
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.06	1.85	1.69	15.7	0.04	0.03	3.86	3.89	0.03	0.98	1.01	—	3,889	3,889	0.17	0.15	5.34	3,943
Area	0.37	0.37	< 0.005	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.98	0.98	< 0.005	< 0.005	—	0.98
Energy	0.04	0.02	0.35	0.30	< 0.005	0.03	—	0.03	0.03	—	0.03	—	429	429	0.07	< 0.005	—	432
Water	—	—	—	—	—	—	—	—	—	—	—	1.14	1.28	2.43	0.12	< 0.005	—	6.24
Waste	—	—	—	—	—	—	—	—	—	—	—	71.3	0.00	71.3	7.12	0.00	—	249
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17.3	17.3
Total	2.47	2.24	2.05	16.2	0.04	0.06	3.86	3.92	0.06	0.98	1.04	72.4	4,320	4,392	7.48	0.16	22.7	4,649

3. Construction Emissions Details

3.1. Demolition (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	3.24	2.72	24.1	23.1	0.05	0.99	—	0.99	0.91	—	0.91	—	5,533	5,533	0.22	0.04	—	5,551
Demolition	—	—	—	—	—	—	4.24	4.24	—	0.64	0.64	—	—	—	—	—	—	—
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	3.24	2.72	24.1	23.1	0.05	0.99	—	0.99	0.91	—	0.91	—	5,533	5,533	0.22	0.04	—	5,551
Demolition	—	—	—	—	—	—	4.24	4.24	—	0.64	0.64	—	—	—	—	—	—	—
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	1.63	1.37	12.2	11.6	0.03	0.50	—	0.50	0.46	—	0.46	—	2,789	2,789	0.11	0.02	—	2,799
Demolition	—	—	—	—	—	—	2.13	2.13	—	0.32	0.32	—	—	—	—	—	—	—
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	0.30	0.25	2.22	2.12	< 0.005	0.09	—	0.09	0.08	—	0.08	—	462	462	0.02	< 0.005	—	463

Demoliti	—	—	—	—	—	—	0.39	0.39	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.09	1.39	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	285	285	0.01	0.01	1.07	289
Vendor	0.01	0.01	0.20	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	150	150	0.01	0.02	0.39	157
Hauling	0.57	0.16	9.52	3.56	0.05	0.13	1.87	2.01	0.13	0.51	0.65	—	7,257	7,257	0.40	1.14	15.8	7,623
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.10	1.22	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	269	269	0.01	0.01	0.03	272
Vendor	0.01	0.01	0.21	0.10	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	150	150	0.01	0.02	0.01	157
Hauling	0.56	0.15	9.86	3.59	0.05	0.13	1.87	2.01	0.13	0.51	0.65	—	7,260	7,260	0.40	1.14	0.41	7,610
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.62	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	137	137	0.01	0.01	0.23	139
Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	75.7	75.7	< 0.005	0.01	0.09	79.1
Hauling	0.28	0.08	4.97	1.80	0.02	0.07	0.93	1.00	0.07	0.26	0.32	—	3,659	3,659	0.20	0.58	3.44	3,839
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.6	22.6	< 0.005	< 0.005	0.04	23.0
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.5	12.5	< 0.005	< 0.005	0.01	13.1
Hauling	0.05	0.01	0.91	0.33	< 0.005	0.01	0.17	0.18	0.01	0.05	0.06	—	606	606	0.03	0.10	0.57	636

3.3. Site Prep (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	4.59	3.85	35.1	33.7	0.06	1.49	—	1.49	1.37	—	1.37	—	6,726	6,726	0.27	0.05	—	6,749
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	2.02	1.94	< 0.005	0.09	—	0.09	0.08	—	0.08	—	387	387	0.02	< 0.005	—	388
Dust From Material Movement	—	—	—	—	—	—	1.13	1.13	—	0.58	0.58	—	—	—	—	—	—	—
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	0.05	0.04	0.37	0.35	< 0.005	0.02	—	0.02	0.01	—	0.01	—	64.1	64.1	< 0.005	< 0.005	—	64.3
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.11	0.11	—	—	—	—	—	—	—

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	0.11	0.10	0.08	1.16	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	237	237	0.01	0.01	0.89	241
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.0	13.0	< 0.005	< 0.005	0.02	13.2
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	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.15	2.15	< 0.005	< 0.005	< 0.005	2.18
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

3.5. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	6.64	5.58	45.6	49.8	0.12	2.05	—	2.05	1.89	—	1.89	—	12,402	12,402	0.50	0.10	—	12,444
Dust From Material Movement	—	—	—	—	—	—	10.3	10.3	—	3.77	3.77	—	—	—	—	—	—	—
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	6.64	5.58	45.6	49.8	0.12	2.05	—	2.05	1.89	—	1.89	—	12,402	12,402	0.50	0.10	—	12,444
Dust From Material Movement	—	—	—	—	—	—	10.3	10.3	—	3.77	3.77	—	—	—	—	—	—	—
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	3.29	2.77	22.6	24.7	0.06	1.02	—	1.02	0.94	—	0.94	—	6,150	6,150	0.25	0.05	—	6,171
Dust From Material Movement	—	—	—	—	—	—	5.11	5.11	—	1.87	1.87	—	—	—	—	—	—	—
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 Equipm	0.60	0.50	4.12	4.51	0.01	0.19	—	0.19	0.17	—	0.17	—	1,018	1,018	0.04	0.01	—	1,022
Dust From Material Movement	—	—	—	—	—	—	0.93	0.93	—	0.34	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.09	1.39	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	285	285	0.01	0.01	1.07	289
Vendor	0.03	0.01	0.40	0.19	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	300	300	0.01	0.04	0.78	314
Hauling	0.84	0.20	14.7	4.98	0.08	0.23	3.20	3.43	0.23	0.88	1.10	—	12,216	12,216	0.64	1.92	27.0	12,832
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.10	1.22	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	269	269	0.01	0.01	0.03	272
Vendor	0.03	0.01	0.41	0.19	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	300	300	0.01	0.04	0.02	313
Hauling	0.84	0.19	15.2	5.01	0.08	0.23	3.20	3.43	0.23	0.88	1.10	—	12,218	12,218	0.64	1.92	0.70	12,807
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.61	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	134	134	0.01	0.01	0.23	136
Vendor	0.01	0.01	0.20	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	149	149	0.01	0.02	0.17	156
Hauling	0.42	0.10	7.57	2.48	0.04	0.11	1.57	1.68	0.11	0.43	0.54	—	6,058	6,058	0.32	0.95	5.77	6,356
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.3	22.3	< 0.005	< 0.005	0.04	22.6
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	24.7	24.7	< 0.005	< 0.005	0.03	25.8
Hauling	0.08	0.02	1.38	0.45	0.01	0.02	0.29	0.31	0.02	0.08	0.10	—	1,003	1,003	0.05	0.16	0.96	1,052

3.7. Grading (2026) - 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	6.29	5.28	41.9	49.4	0.12	1.81	—	1.81	1.67	—	1.67	—	12,407	12,407	0.50	0.10	—	12,449
Dust From Material Movement	—	—	—	—	—	—	10.3	10.3	—	3.77	3.77	—	—	—	—	—	—	—
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	6.29	5.28	41.9	49.4	0.12	1.81	—	1.81	1.67	—	1.67	—	12,407	12,407	0.50	0.10	—	12,449
Dust From Material Movement	—	—	—	—	—	—	10.3	10.3	—	3.77	3.77	—	—	—	—	—	—	—
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	1.71	1.43	11.4	13.4	0.03	0.49	—	0.49	0.45	—	0.45	—	3,365	3,365	0.14	0.03	—	3,377

Dust From Material Movement	—	—	—	—	—	—	2.80	2.80	—	1.02	1.02	—	—	—	—	—	—	—
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	0.31	0.26	2.07	2.45	0.01	0.09	—	0.09	0.08	—	0.08	—	557	557	0.02	< 0.005	—	559
Dust From Material Movement	—	—	—	—	—	—	0.51	0.51	—	0.19	0.19	—	—	—	—	—	—	—
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	0.13	0.11	0.08	1.30	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	279	279	0.01	0.01	0.98	283
Vendor	0.02	0.01	0.38	0.18	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	295	295	0.01	0.04	0.72	308
Hauling	0.77	0.20	14.1	4.91	0.08	0.23	3.20	3.43	0.15	0.88	1.03	—	11,958	11,958	0.56	1.92	25.3	12,569
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.09	1.14	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	263	263	0.01	0.01	0.03	267
Vendor	0.02	0.01	0.40	0.18	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	295	295	0.01	0.04	0.02	308
Hauling	0.76	0.19	14.6	4.93	0.08	0.23	3.20	3.43	0.15	0.88	1.03	—	11,959	11,959	0.56	1.92	0.66	12,547
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	72.1	72.1	< 0.005	< 0.005	0.11	73.1
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	80.0	80.0	< 0.005	0.01	0.08	83.6

Hauling	0.21	0.05	3.95	1.33	0.02	0.06	0.86	0.92	0.04	0.24	0.28	—	3,243	3,243	0.15	0.52	2.98	3,406
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.9	11.9	< 0.005	< 0.005	0.02	12.1
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.2	13.2	< 0.005	< 0.005	0.01	13.8
Hauling	0.04	0.01	0.72	0.24	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	537	537	0.03	0.09	0.49	564

3.9. 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	38.5	37.6	30.5	81.6	0.07	1.85	—	1.85	1.60	—	1.60	—	6,608	6,608	0.27	0.05	—	6,631
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	38.5	37.6	30.5	81.6	0.07	1.85	—	1.85	1.60	—	1.60	—	6,608	6,608	0.27	0.05	—	6,631
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	19.1	18.6	15.1	40.5	0.03	0.92	—	0.92	0.79	—	0.79	—	3,277	3,277	0.13	0.03	—	3,288

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	3.48	3.40	2.76	7.38	0.01	0.17	—	0.17	0.14	—	0.14	—	543	543	0.02	< 0.005	—	544
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	0.88	0.81	0.61	9.26	0.00	0.00	1.69	1.69	0.00	0.40	0.40	—	1,898	1,898	0.09	0.07	7.12	1,927
Vendor	0.02	0.01	0.33	0.15	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	250	250	0.01	0.04	0.65	262
Hauling	0.56	0.16	9.43	3.52	0.05	0.13	1.85	1.99	0.13	0.51	0.64	—	7,185	7,185	0.40	1.13	15.6	7,548
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.86	0.79	0.68	8.11	0.00	0.00	1.69	1.69	0.00	0.40	0.40	—	1,792	1,792	0.10	0.07	0.18	1,815
Vendor	0.02	0.01	0.35	0.16	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	250	250	0.01	0.04	0.02	261
Hauling	0.55	0.15	9.76	3.56	0.05	0.13	1.85	1.99	0.13	0.51	0.64	—	7,188	7,188	0.40	1.13	0.40	7,535
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.39	0.34	4.08	0.00	0.00	0.83	0.83	0.00	0.19	0.19	—	897	897	0.05	0.03	1.52	910
Vendor	0.01	< 0.005	0.17	0.08	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	124	124	0.01	0.02	0.14	130
Hauling	0.28	0.08	4.84	1.75	0.02	0.07	0.91	0.98	0.07	0.25	0.32	—	3,564	3,564	0.20	0.56	3.35	3,739
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.75	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	148	148	0.01	0.01	0.25	151
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20.6	20.6	< 0.005	< 0.005	0.02	21.5
Hauling	0.05	0.01	0.88	0.32	< 0.005	0.01	0.17	0.18	0.01	0.05	0.06	—	590	590	0.03	0.09	0.55	619

3.11. Building Construction (2026) - 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	38.3	37.4	29.0	81.4	0.07	1.73	—	1.73	1.50	—	1.50	—	6,609	6,609	0.27	0.05	—	6,631
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	38.3	37.4	29.0	81.4	0.07	1.73	—	1.73	1.50	—	1.50	—	6,609	6,609	0.27	0.05	—	6,631
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	38.3	37.4	29.0	81.4	0.07	1.73	—	1.73	1.50	—	1.50	—	6,609	6,609	0.27	0.05	—	6,631
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	6.99	6.83	5.30	14.9	0.01	0.32	—	0.32	0.27	—	0.27	—	1,094	1,094	0.04	0.01	—	1,098

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	0.84	0.72	0.55	8.65	0.00	0.00	1.69	1.69	0.00	0.40	0.40	—	1,859	1,859	0.09	0.07	6.51	1,887
Vendor	0.02	0.01	0.32	0.15	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	246	246	0.01	0.04	0.60	257
Hauling	0.51	0.16	9.06	3.48	0.05	0.13	1.85	1.99	0.09	0.51	0.60	—	7,034	7,034	0.35	1.13	14.7	7,394
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.78	0.71	0.62	7.63	0.00	0.00	1.69	1.69	0.00	0.40	0.40	—	1,756	1,756	0.09	0.07	0.17	1,779
Vendor	0.02	0.01	0.33	0.15	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	246	246	0.01	0.04	0.02	257
Hauling	0.50	0.15	9.40	3.51	0.05	0.13	1.85	1.99	0.09	0.51	0.60	—	7,036	7,036	0.35	1.13	0.38	7,383
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.78	0.71	0.62	7.70	0.00	0.00	1.67	1.67	0.00	0.39	0.39	—	1,771	1,771	0.09	0.07	2.81	1,797
Vendor	0.02	0.01	0.33	0.15	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	246	246	0.01	0.04	0.26	257
Hauling	0.51	0.15	9.35	3.49	0.05	0.13	1.84	1.97	0.09	0.50	0.59	—	7,035	7,035	0.35	1.13	6.37	7,387
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.13	0.11	1.41	0.00	0.00	0.30	0.30	0.00	0.07	0.07	—	293	293	0.02	0.01	0.46	298
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	40.7	40.7	< 0.005	0.01	0.04	42.5
Hauling	0.09	0.03	1.71	0.64	0.01	0.02	0.34	0.36	0.02	0.09	0.11	—	1,165	1,165	0.06	0.19	1.05	1,223

3.13. Building Construction (2027) - 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	38.2	37.3	27.8	81.3	0.07	1.63	—	1.63	1.40	—	1.40	—	6,609	6,609	0.27	0.05	—	6,632
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	38.2	37.3	27.8	81.3	0.07	1.63	—	1.63	1.40	—	1.40	—	6,609	6,609	0.27	0.05	—	6,632
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	14.0	13.7	10.2	29.9	0.03	0.60	—	0.60	0.51	—	0.51	—	2,426	2,426	0.10	0.02	—	2,435
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	2.56	2.50	1.86	5.45	< 0.005	0.11	—	0.11	0.09	—	0.09	—	402	402	0.02	< 0.005	—	403
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	0.77	0.71	0.49	8.20	0.00	0.00	1.69	1.69	0.00	0.40	0.40	—	1,828	1,828	0.08	0.07	5.92	1,855
Vendor	0.02	0.01	0.30	0.14	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	240	240	0.01	0.03	0.54	251
Hauling	0.51	0.16	8.73	3.39	0.05	0.13	1.85	1.99	0.09	0.51	0.60	—	6,867	6,867	0.35	1.08	13.6	7,213
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.69	0.62	7.20	0.00	0.00	1.69	1.69	0.00	0.40	0.40	—	1,726	1,726	0.09	0.07	0.15	1,749
Vendor	0.02	0.01	0.31	0.15	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	241	241	0.01	0.03	0.01	251
Hauling	0.50	0.15	9.03	3.43	0.05	0.13	1.85	1.99	0.09	0.51	0.60	—	6,870	6,870	0.35	1.09	0.35	7,203
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.28	0.25	0.22	2.68	0.00	0.00	0.61	0.61	0.00	0.14	0.14	—	639	639	0.03	0.02	0.94	648
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	88.3	88.3	< 0.005	0.01	0.09	92.2
Hauling	0.19	0.06	3.32	1.25	0.02	0.05	0.67	0.72	0.03	0.18	0.22	—	2,522	2,522	0.13	0.40	2.15	2,646
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.49	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	106	106	0.01	< 0.005	0.16	107
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.6	14.6	< 0.005	< 0.005	0.01	15.3
Hauling	0.03	0.01	0.61	0.23	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	417	417	0.02	0.07	0.36	438

3.15. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.07	3.41	24.9	29.8	0.07	1.04	—	1.04	0.95	—	0.95	—	7,127	7,127	0.29	0.06	—	7,151
Paving	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	4.07	3.41	24.9	29.8	0.07	1.04	—	1.04	0.95	—	0.95	—	7,127	7,127	0.29	0.06	—	7,151
Paving	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	1.72	1.44	10.5	12.6	0.03	0.44	—	0.44	0.40	—	0.40	—	3,007	3,007	0.12	0.02	—	3,017
Paving	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.26	1.92	2.29	0.01	0.08	—	0.08	0.07	—	0.07	—	498	498	0.02	< 0.005	—	500
Paving	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.09	1.39	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	285	285	0.01	0.01	1.07	289
Vendor	0.01	0.01	0.20	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	150	150	0.01	0.02	0.39	157

Hauling	0.12	0.03	2.07	0.77	0.01	0.03	0.41	0.44	0.03	0.11	0.14	—	1,581	1,581	0.09	0.25	3.44	1,661
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.10	1.22	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	269	269	0.01	0.01	0.03	272
Vendor	0.01	0.01	0.21	0.10	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	150	150	0.01	0.02	0.01	157
Hauling	0.12	0.03	2.15	0.78	0.01	0.03	0.41	0.44	0.03	0.11	0.14	—	1,581	1,581	0.09	0.25	0.09	1,658
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.52	0.00	0.00	0.11	0.11	0.00	0.02	0.02	—	114	114	0.01	< 0.005	0.19	116
Vendor	0.01	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	63.4	63.4	< 0.005	0.01	0.07	66.2
Hauling	0.05	0.01	0.91	0.33	< 0.005	0.01	0.17	0.18	0.01	0.05	0.06	—	667	667	0.04	0.10	0.63	700
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.9	18.9	< 0.005	< 0.005	0.03	19.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.5	10.5	< 0.005	< 0.005	0.01	11.0
Hauling	0.01	< 0.005	0.17	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	110	110	0.01	0.02	0.10	116

3.17. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	5.34	5.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.16	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.8	23.8	< 0.005	< 0.005	—	23.9
Architectural Coatings	0.95	0.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.94	3.94	< 0.005	< 0.005	—	3.95
Architectural Coatings	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.26	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	53.4	53.4	< 0.005	< 0.005	0.20	54.2
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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.06	9.06	< 0.005	< 0.005	0.02	9.20
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	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.50	1.50	< 0.005	< 0.005	< 0.005	1.52
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

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	270	270	0.20	0.02	—	282
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	12.3	12.3	0.01	< 0.005	—	12.8
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	282	282	0.21	0.03	—	295
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	270	270	0.20	0.02	—	282
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	12.3	12.3	0.01	< 0.005	—	12.8
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	282	282	0.21	0.03	—	295
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	44.7	44.7	0.03	< 0.005	—	46.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	2.03	2.03	< 0.005	< 0.005	—	2.12
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	46.7	46.7	0.03	< 0.005	—	48.8

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	0.21	0.11	1.93	1.62	0.01	0.15	—	0.15	0.15	—	0.15	—	2,307	2,307	0.20	< 0.005	—	2,314
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
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.21	0.11	1.93	1.62	0.01	0.15	—	0.15	0.15	—	0.15	—	2,307	2,307	0.20	< 0.005	—	2,314
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	0.21	0.11	1.93	1.62	0.01	0.15	—	0.15	0.15	—	0.15	—	2,307	2,307	0.20	< 0.005	—	2,314
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
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.21	0.11	1.93	1.62	0.01	0.15	—	0.15	0.15	—	0.15	—	2,307	2,307	0.20	< 0.005	—	2,314
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	0.04	0.02	0.35	0.30	< 0.005	0.03	—	0.03	0.03	—	0.03	—	382	382	0.03	< 0.005	—	383

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
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.04	0.02	0.35	0.30	< 0.005	0.03	—	0.03	0.03	—	0.03	—	382	382	0.03	< 0.005	—	383

4.3. Area Emissions by Source

4.3.1. 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	1.69	1.69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.52	0.48	0.02	2.92	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	12.0	12.0	< 0.005	< 0.005	—	12.0
Total	2.31	2.27	0.02	2.92	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	12.0	12.0	< 0.005	< 0.005	—	12.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	1.69	1.69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	1.79	1.79	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.31	0.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.05	0.04	< 0.005	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.98	0.98	< 0.005	< 0.005	—	0.98
Total	0.37	0.37	< 0.005	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.98	0.98	< 0.005	< 0.005	—	0.98

4.4. Water Emissions by Land Use

4.4.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	6.90	3.82	10.7	0.71	0.02	—	33.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	3.93	3.93	< 0.005	< 0.005	—	4.11
Total	—	—	—	—	—	—	—	—	—	—	—	6.90	7.75	14.7	0.71	0.02	—	37.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	6.90	3.82	10.7	0.71	0.02	—	33.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	3.93	3.93	< 0.005	< 0.005	—	4.11
Total	—	—	—	—	—	—	—	—	—	—	—	6.90	7.75	14.7	0.71	0.02	—	37.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.63	1.77	0.12	< 0.005	—	5.56
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.65	0.65	< 0.005	< 0.005	—	0.68
Total	—	—	—	—	—	—	—	—	—	—	—	1.14	1.28	2.43	0.12	< 0.005	—	6.24

4.5. Waste Emissions by Land Use

4.5.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	430	0.00	430	43.0	0.00	—	1,504
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.50	0.00	0.50	0.05	0.00	—	1.75
Total	—	—	—	—	—	—	—	—	—	—	—	430	0.00	430	43.0	0.00	—	1,506
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	430	0.00	430	43.0	0.00	—	1,504
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.50	0.00	0.50	0.05	0.00	—	1.75
Total	—	—	—	—	—	—	—	—	—	—	—	430	0.00	430	43.0	0.00	—	1,506
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	71.2	0.00	71.2	7.11	0.00	—	249
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.08	0.00	0.08	0.01	0.00	—	0.29
Total	—	—	—	—	—	—	—	—	—	—	—	71.3	0.00	71.3	7.12	0.00	—	249

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	105	105
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	105	105
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	105	105
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	105	105
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17.3	17.3
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17.3	17.3

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
Demolition	Demolition	1/1/2025	7/3/2025	7.00	184	—
Site Prep	Site Preparation	7/4/2025	7/24/2025	7.00	21.0	—
Grading	Grading	7/4/2025	4/9/2026	7.00	280	—
Building Construction	Building Construction	7/4/2025	5/14/2027	7.00	680	—
Paving	Paving	7/4/2025	12/4/2025	7.00	154	—
Architectural Coating	Architectural Coating	7/4/2025	9/6/2025	7.00	65.0	—

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
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Skid Steer Loaders	Diesel	Average	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Demolition	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Demolition	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Demolition	Signal Boards	Diesel	Average	2.00	8.00	6.00	0.82
Demolition	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Site Prep	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Prep	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37

Site Prep	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Site Prep	Signal Boards	Diesel	Average	2.00	8.00	6.00	0.82
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Grading	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Grading	Graders	Diesel	Average	2.00	8.00	148	0.41
Grading	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Grading	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Grading	Rollers	Diesel	Average	3.00	8.00	36.0	0.38
Grading	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Grading	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	150	0.36
Grading	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Grading	Plate Compactors	Diesel	Average	2.00	8.00	8.00	0.43
Grading	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Signal Boards	Diesel	Average	2.00	8.00	6.00	0.82
Grading	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Building Construction	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Skid Steer Loaders	Diesel	Average	2.00	8.00	71.0	0.37
Building Construction	Graders	Diesel	Average	1.00	8.00	148	0.41
Building Construction	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Building Construction	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73

Building Construction	Crushing/Proc. Equipment	Gasoline	Average	1.00	8.00	12.0	0.85
Building Construction	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Building Construction	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Building Construction	Aerial Lifts	Electric	Average	1.00	8.00	46.0	0.31
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Building Construction	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Building Construction	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Building Construction	Dumpers/Tenders	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Building Construction	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Building Construction	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Signal Boards	Diesel	Average	2.00	8.00	6.00	0.82
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Paving	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Paving	Graders	Diesel	Average	1.00	8.00	148	0.41
Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38
Paving	Plate Compactors	Diesel	Average	2.00	8.00	8.00	0.43
Paving	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Paving	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Paving	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42

Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Signal Boards	Diesel	Average	2.00	8.00	6.00	0.82
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	82.0	0.20
Paving	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
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
Demolition	—	—	—	—
Demolition	Worker	30.0	12.0	LDA,LDT1,LDT2
Demolition	Vendor	6.00	7.63	HHDT,MHDT
Demolition	Hauling	101	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	30.0	12.0	LDA,LDT1,LDT2
Grading	Vendor	12.0	7.63	HHDT,MHDT
Grading	Hauling	69.0	50.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	200	12.0	LDA,LDT1,LDT2
Building Construction	Vendor	10.0	7.63	HHDT,MHDT
Building Construction	Hauling	100	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	30.0	12.0	LDA,LDT1,LDT2

Paving	Vendor	6.00	7.63	HHDT,MHDT
Paving	Hauling	22.0	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	5.63	12.0	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.63	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Site Prep	—	—	—	—
Site Prep	Worker	25.0	12.0	LDA,LDT1,LDT2
Site Prep	Vendor	0.00	7.63	HHDT,MHDT
Site Prep	Hauling	0.00	20.0	HHDT
Site Prep	Onsite truck	0.00	—	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	102,045	34,015	6,798

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 (Building Square Footage)	Acres Paved (acres)

Demolition	0.00	0.00	0.00	1,218,016	—
Site Prep	0.00	0.00	31.5	0.00	—
Grading	101,992	103,013	290	0.00	—
Paving	0.00	0.00	0.00	0.00	7.11

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
High Turnover (Sit Down Restaurant)	2.53	86%
Parking Lot	1.58	50%
City Park	3.00	50%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	85.1	45.1	0.03	< 0.005
2027	85.1	45.1	0.03	< 0.005
2025	85.1	540	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
Total all Land Uses	2,449	2,449	2,449	893,885	30,318	30,318	30,318	11,066,070

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	102,045	34,015	6,798

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

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)
High Turnover (Sit Down Restaurant)	2,185,421	45.1	0.0330	0.0040	7,200,000
Parking Lot	99,250	45.1	0.0330	0.0040	0.00
City Park	0.00	45.1	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
High Turnover (Sit Down Restaurant)	3,600,000	1,204,813
Parking Lot	0.00	0.00
City Park	0.00	6,000,171

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
High Turnover (Sit Down Restaurant)	798	—
Parking Lot	0.00	—
City Park	0.93	—

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
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

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	7.46	annual days of extreme heat
Extreme Precipitation	2.35	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	1.26	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 (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
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	N/A	N/A	N/A	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	0	0	0	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	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 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	29.9
AQ-PM	51.3
AQ-DPM	89.9
Drinking Water	29.0
Lead Risk Housing	—
Pesticides	0.00
Toxic Releases	43.0
Traffic	75.0
Effect Indicators	—
CleanUp Sites	97.5
Groundwater	99.0
Haz Waste Facilities/Generators	93.5
Impaired Water Bodies	66.7
Solid Waste	52.9
Sensitive Population	—
Asthma	78.7
Cardio-vascular	31.8
Low Birth Weights	—
Socioeconomic Factor Indicators	—
Education	—
Housing	—
Linguistic	—
Poverty	—
Unemployment	—

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	—
Employed	—
Median HI	—
Education	—
Bachelor's or higher	—
High school enrollment	—
Preschool enrollment	—
Transportation	—
Auto Access	—
Active commuting	—
Social	—
2-parent households	—
Voting	—
Neighborhood	—
Alcohol availability	—
Park access	—
Retail density	—
Supermarket access	—
Tree canopy	—
Housing	—
Homeownership	—
Housing habitability	—
Low-inc homeowner severe housing cost burden	—
Low-inc renter severe housing cost burden	—

Uncrowded housing	—
Health Outcomes	—
Insured adults	—
Arthritis	1.8
Asthma ER Admissions	17.6
High Blood Pressure	5.4
Cancer (excluding skin)	5.1
Asthma	61.7
Coronary Heart Disease	1.3
Chronic Obstructive Pulmonary Disease	2.1
Diagnosed Diabetes	16.2
Life Expectancy at Birth	0.0
Cognitively Disabled	0.0
Physically Disabled	0.0
Heart Attack ER Admissions	35.6
Mental Health Not Good	43.4
Chronic Kidney Disease	14.8
Obesity	45.5
Pedestrian Injuries	0.0
Physical Health Not Good	32.1
Stroke	7.6
Health Risk Behaviors	—
Binge Drinking	24.0
Current Smoker	21.4
No Leisure Time for Physical Activity	36.8
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	28.1

Children	99.4
Elderly	99.8
English Speaking	0.0
Foreign-born	0.0
Outdoor Workers	0.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	16.4
Traffic Density	0.0
Traffic Access	87.4
Other Indices	—
Hardship	0.0
Other Decision Support	—
2016 Voting	0.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	—
Healthy Places Index Score for Project Location (b)	—
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)	No

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
Characteristics: Project Details	Based on project specific information
Construction: Construction Phases	Calculated using construction schedules provided for each component
Construction: Off-Road Equipment	cumulative list of equipment per phase from construction plans
Construction: Dust From Material Movement	Calculated based on construction plans provided.
Land Use	based on planning sheets and other data provided
Construction: Paving	per construction assumptions
Construction: Trips and VMT	Calculated trips per assumption sheets provided for each project component.
Operations: Water and Waste Water	Based on utility statements of other Topgolf facilities
Operations: Energy Use	Calculated from provided monthly utility usage of other Topgolf facilities

Attachment 2. Waterside Emissions Calculations

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							Emissions factor (g/hp-hour)			Emissions (total grams)		
Type of Craft		**Number of Boats**	**Hours Per Day**	**Days in Operation**	**HP**	**Load Factor**	**CO2**	**CH4**	**N20**	**CO2**	**CH4**	**N20**
Tow Boat	Main Engine	1	1.5	2	1338	0.68	588.14	0.01	0.02	1,605,340	27	55
	Aux Engine	1	1.5	2	114	0.43	588.14	0.02	0.02	86,492	3	3

Pollutant	**GWP**	**Total grams**	**grams CO2e**	**Total MT CO2e**
CO2	1	1,691,832	1,691,832	2
CH4	25	30	756	0
N2O	298	58	17,144	0
Sum		-		**2**

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