CALIFORNIA
AIR RESOURCES BOARD

Gavin Newsom, Governor
Jared Blumenfeld, CalEPA Secretary
Mary D. Nichols, Chair

December 19, 2019

Ms. Kate Gordon, Director
Office of Planning and Research
Office of Governor Gavin Newsom
1400 10th Street
Sacramento, California 95814

Dear Ms. Gordon:

The Jobs and Economic Improvement through Environmental Leadership Act (Assembly Bill 900, statutes of 2011) authorizes the Governor to certify a leadership project for streamlining under the California Environmental Quality Act (CEQA) if the project meets certain conditions. One condition for certification is that the project does not result in any net additional emissions of greenhouse gases (GHG), including GHG emissions from employee transportation, as determined by the California Air Resources Board (CARB).

Reservoir Community Partners, LLC (the Applicant) submitted an original application to CARB on June 12, 2019, the revised mitigation letter submitted on June 17, 2019, and clarifying documentation submitted on October 22, November 14, December 12, and December 17, 2019 for the proposed Balboa Reservoir Mixed Use Project. As required by the Governor's Guidelines for Streamlining Judicial Review under CEQA, the application includes proposed GHG quantification methodologies and supporting documentation. CARB staff conducted an evaluation of the GHG emission estimates and voluntary improvement measures submitted by the Applicant, and confirmed that the Applicant's methodology, calculations, and documentation are adequate. Based on the documentation submitted by the Applicant, CARB has determined that the Balboa Mixed-Use Project will not result in any net additional GHG emissions for purposes of certification under AB 900 once the conditions of approval of the project described in the enclosed staff analysis document are satisfied. CARB staff's evaluation and an Executive Order noting CARB's determination are enclosed.

If you have any questions regarding the evaluation or determination, please contact Ms. Nicole Dolney, Chief of Transportation Planning Branch, Sustainable Transportation and Communities Division at (916) 322-1695 or by email at nicole.dolney@arb.ca.gov.

Sincerely,

Richard W. Corey
Executive Officer

Enclosures

cc: (via email, with enclosures):

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State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER G-19-195

Relating to Determination of No Net Additional Greenhouse Gas Emissions Under Public Resources Code section 21183, subdivision (c) for Balboa Reservoir Mixed-Use Project

WHEREAS, in September 2011, Governor Brown signed the "Jobs and Economic Improvement through Environmental Leadership Act" (AB 900);

WHEREAS, under AB 900, the Governor may certify certain projects for judicial streamlining under the California Environmental Quality Act (CEQA) if certain conditions are met;

WHEREAS, under California Public Resources Code section 21183, subdivision (c), one condition for the Governor's certification is that the project does not result in any net additional emission of greenhouse gases (GHG), as determined by the California Air Resources Board (CARB);

WHEREAS, the Governor's Guidelines for Streamlining Judicial Review under the California Environmental Quality Act require for purposes of CARB's determination on GHG emissions that an applicant submit electronically to CARB a proposed methodology for quantifying the project's net additional GHG emissions and documentation that the project does not result in any net additional GHG emissions;

WHEREAS, pursuant to the Governor's Guidelines, Reservoir Community Partners, LLC (the Applicant) submitted its initial proposed GHG quantification methodologies and documentation to CARB on the proposed Balboa Reservoir Mixed-Use Project (Proposed Project) and potential variant (Project Variant) on June 12, 2019, the revised mitigation letter submitted on June 17, 2019, and clarifying documentation submitted on October 22, November 14, December 12, and December 17, 2019;

WHEREAS, as set forth in greater detail in the submitted application and CARB's Staff Evaluation of AB 900 Application for Balboa Reservoir Mixed Use Project (the BP Project), the project's net additional GHG emissions are as follows:

1. Construction GHG Emissions: Additional 13,673 metric tons carbon dioxide equivalent (MT CO_2e) emissions from construction and demolition activities for the Proposed Project, or 17,574 MT CO_2e for the Project Variant. Construction-generated GHG emissions were estimated from equipment used for construction activities and from both on-site and off-site vehicles and equipment;

2. Operation-Related GHG Emissions: Net additional 3,323 MT CO_2e emissions during the first year (2027) of operational full buildout from the Proposed Project, or net additional 4,022 CO_2e from the Project Variant and declining operational emissions in future years over the lifetime of the BP Project through 2053.

3. Total-Related GHG Emissions: Net additional 90,993 MT CO_2e from combined construction and operation of the Proposed Project and 111,650 MT CO_2e from combined construction and operation of the Project Variant.

WHEREAS, in the application, the applicant proposes to secure 13,673 metric tons of one time voluntary carbon credits sufficient to offset emissions generated during construction of the Proposed Project, or 17,574 metric tons for the Project Variant. The Applicant would secure 77,320 metric tons of carbon credits for the Proposed Project, or 94,076 metric tons for the Project Variant, regardless of any project design or any other GHG reduction features ultimately implemented as part of the Proposed Project that could reduce GHG emissions further, to offset the net increase in emissions generated during BP Project operation through purchasing voluntary carbon credits issued by an accredited carbon registry to fully offset these identified construction and operational GHG emissions;

WHEREAS, the applicant has committed to purchase voluntary carbon offsets issued by an accredited carbon registry in an amount sufficient to offset the net increase in operation-related GHG emissions. The Applicant has committed to execute contracts to offset the net increase in GHG emissions generated during BP Project operation for any phase of the BP Project prior to issuance of the final Certificate of Occupancy for the first building constructed in each phase of the BP Project;

WHEREAS, enforcement of compliance for GHG emissions reduction measures and procurement of offsets will be outlined in the terms of the Development Agreement between the lead agency and the Applicant, and those conditions will be fully monitored and enforced by the lead agency for the life of the obligation, pursuant to Public Resources Code section 21183, subdivision (e).

WHEREAS, CARB staff reviewed and evaluated the application in consultation with the lead agency (the City of San Francisco);

WHEREAS, CARB staff conducted an evaluation of the GHG emission estimates and voluntary mitigation included in the application submitted by the applicant and confirmed the documentation provides an adequate technical basis for estimating total GHG emissions and voluntary mitigation for the BP Project;

WHEREAS, CARB's review and determination on the BP Project's GHG emissions is for the limited purpose of the Governor's findings and certification under AB 900 and should not be construed as meeting any other requirement under State or federal law, including CEQA; the lead agency remains responsible for full CEQA compliance for the BP Project;

NOW, THEREFORE, based on CARB Staff's Evaluation (Attachment 1) of the documentation submitted by the Applicant (Attachment 2), I determine that the Balboa Reservoir Mixed-Use Project will not result in any net additional GHG emissions pursuant to Public Resources Code section 21183, subdivision (c) for purposes of certification under AB 900.

Executed at Sacramento, California this 18th day of December 2019.

Richard W. Corey
Executive Officer

Attachments

1. CARB Staff Evaluation of AB 900 Application for Balboa Reservoir Mixed-Use Project
2. Balboa Reservoir Mixed-Use Greenhouse Gas Emissions Methodology Documentation for AB 900 Application

ATTACHMENT 1

ARB Staff Evaluation of AB 900 Application for

Balboa Reservoir Mixed Use Project

CARB Staff Evaluation of AB 900 Application for Balboa Reservoir Mixed Use Project

December 19, 2019

1. Executive Summary

Reservoir Community Partners, LLC (hereafter referred to as the Applicant) has proposed the Balboa Reservoir Mixed-Use Project (hereafter referred to as the BP Project), a new mixed-use development within the City and County of San Francisco (hereafter referred to as the City). The Applicant is seeking certification for the BP Project as an Environmental Leadership Development Project (ELDP) pursuant to Assembly Bill (AB) 900 (Buchanan, Chapter 354, Statutes of 2011), the Jobs and Economic Improvement through Environmental Leadership Act of 2011, as amended effective January 1, 2018, and codified in Public Resources Code Section 21178 et. seq. AB 900 provides for streamlined judicial review of challenges to the Lead Agency's decision to certify the BP Project's environmental impact report (EIR) or grant BP Project approval if certain conditions are met. To be eligible for streamlining, BP Project must not result in any net additional emission of greenhouse gases (GHG), as determined by the California Air Resources Board (CARB). This technical evaluation supports CARB's determination.

CARB staff reviewed the projected GHG emissions provided by the Applicant using the data sources, emission factors, emission calculations, and assumptions in the documentation provided by the Applicant. The documentation provided by the Applicant includes the application submitted on June 12, 2019, the revised mitigation letter submitted on June 17, 2019, and clarifying documentation submitted on October 22, November 14, December 12, and December 17, 2019. Collectively these materials comprise the Application and are included in Attachment 2.

Based on an evaluation of the documentation, CARB staff concurs with the GHG quantification in the Applicant's proposal (Attachment 2) and concludes that, with commitments to purchase GHG offset credits, neither the Proposed Project nor the Project Variant[1] would result in any net additional GHG emissions relative to the baseline. CARB staff confirms that the Proposed Project or Project Variant would meet the GHG emissions requirements of AB 900 pursuant to Division 25.5 (commencing

[1] In addition to the Proposed Project, one variant is also currently under consideration to allow for flexibility in the development of the project, referred to in this analysis as the Project Variant. For CARB's determination, the Project Variant has been evaluated because it has higher emissions than the Proposed Project. The Project Variant, as well as the Proposed Project, would meet the AB 900 reduction requirements, if either are implemented

with Section 38500) of the Health and Safety Code. (Pub. Resources Code, § 21183, subd. (c).).

Construction and operation of the Proposed Project would result in a total net increase of 90,993 MT CO_2e over the BP Project's entire 7-year construction and 30-year operational life, with construction of the Proposed Project resulting in 13,673 MT CO_2e, and operation of the Proposed Project resulting in a net increase of 77,320 CO_2e over the project's operational life. In the event the Proposed Project is constructed, the Applicant would purchase GHG offset credits to fully reduce the 90,993 MT, regardless of any project design or any other GHG reduction features ultimately implemented as part of the Proposed Project that could reduce GHG emissions further[2]. A detailed description of emissions by source is described in subsequent sections.

Construction and operation of the Project Variant would result in a total net increase of 111,650 metric tons (MT) carbon dioxide equivalent (CO_2e) over the BP Project's entire 7-year construction and 30-year operational life, with construction of the Project Variant resulting in 17,574 MT CO_2e, and operation of the Project Variant resulting in a net increase of 94,076 CO_2e over the project's operational life[3]. In the event the Project Variant is constructed, the Applicant would purchase GHG offset credits to fully reduce the 111,650 MT, regardless of any project design or any other GHG reduction features ultimately implemented as part of the Project Variant that could reduce GHG emissions further[2]. A detailed description of emissions by source is described in subsequent sections.

To offset construction emissions, the Applicant will enter into one or more contracts to purchase GHG offset credits issued by an accredited carbon registry. The offset contracts will be executed prior to issuance of grading permits for each phase of construction to ensure the construction emissions attributable to each phase are fully offset.

To reduce operational emissions, the Application commits the BP Project sponsor to purchase GHG offset credits issued by an accredited carbon registry. The Applicant will purchase the GHG offset credits issued by an accredited carbon registry for the net increase in operational emissions prior to issuance of the final Certificate of Occupancy for the first building constructed in each phase of the BP Project. Enforcement of

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[2] The Applicant sought approval of a recalculation of offset obligations based on mitigating features that may be implemented at time of construction, however, without specifics calculation methods, CARB was unable to evaluate these potential emission reducing actions and approve this approach.

[3] Construction and operation of the Proposed Project would result in a total net increase of 90,993 MT CO_2e over the project's entire 7-year construction and 30-year operational life, with construction of the Proposed Project resulting in 13,673 MT CO_2e, and operation of the Proposed Project resulting in a net increase of 77,320 MTCO_2e over the project's operational life.

compliance will be outlined in the terms of the development agreement between the City and the Applicant.

2. Introduction

Reservoir Community Partners, LLC proposed a new mixed-use development on a 17.6 acre site located at the former Balboa Reservoir, which recently served as a parking lot for the City College of San Francisco (Project Site), as described in Attachment 2[4]. The property is owned by the City and County of San Francisco under the jurisdiction of the San Francisco Public Utilities Commission.

The Applicant is seeking certification for the BP Project under AB 900, which provides for streamlined judicial review of challenges to the Lead Agency's decision to certify the BP Project EIR or grant BP Project approval if certain conditions are met, as described below. CARB staff prepared this technical evaluation of the GHG emissions from the Proposed Project and Project Variant as part of its determination. This evaluation includes an executive summary, an overview of the AB 900 net zero additional GHG emissions requirement, a brief description of the BP Project, a technical review and assessment of GHG emissions information provided by the Applicant in its AB 900 Application, and CARB staff's determination regarding whether the BP Project meets the GHG requirements, as provided in AB 900.

3. Overview of AB 900

AB 900 as amended by Senate Bill (SB) 743 (2013), SB 734 (2016) and AB 246 (2017) provides streamlined judicial review of challenges to the Lead Agency's decision to certify the BP Project EIR or grant BP Project approval if certain conditions are met. One condition is that the "project does not result in any net additional emissions of greenhouse gases, including greenhouse gas emissions from employee transportation, as determined by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code." (Pub. Resources Code, §21183, subd. (c).) This is the only condition that involves a determination by CARB.

The role of CARB in reviewing AB 900 applications for purposes of the Governor's certification is limited to an evaluation of the quantification methods and documentation

[4] Attachment 2 contains the following documentation provided by the Applicant: application submitted on June 12, 2019, the revised mitigation letter submitted on June 17, 2019, and clarifying documentation submitted on October 22, November 14, and December 12, 2019. These comprise the Applicant's full AB 900 submittal, when taken in their entirety, and are used by CARB staff to make the AB 900 determination.

submitted by the Applicant to determine whether the BP Project would result in no net increase of GHG emissions[5].

The Governor's Guidelines for AB 900 applications require applicants to submit a proposed methodology for quantifying a project's GHG emissions and documentation that the project will not result in any net additional GHG emissions. The documentation must quantify direct and indirect GHG emissions associated with the project's construction and operation, including GHG emissions from employee transportation, and the net emissions of the project after accounting for any mitigation measures. The project's net emissions, after mitigation, must be monitored and enforced consistent with Public Resources Code §21183, subdivision (e).

4. Existing Baseline Conditions

The BP Project site is located just west of City College of San Francisco (CCSF), in the West of Twin Peaks area of the City and County of San Francisco. The approximately 17.6 acre site is located on Lee Avenue just north of Ocean Avenue. The property currently serves as an overflow parking lot for CCSF with a 1,007-space (1,200,000 square feet [ft^2]) parking lot. The existing baseline land uses are summarized in Table 1.

5. Project Description

<u>Proposed Project</u>

The Proposed Project would replace the existing 1,007-space (1,200,000 ft^2) parking lot with seven buildings comprised of the following:

- 1,100 apartment units (1,000 mid-rise apartments and 100 townhouses).
- A 10,000 ft^2 childcare center.
- A 7,500 ft^2 retail center.
- 550 underground residential parking spaces.
- 750 underground public parking spaces.

The proposed land uses are summarized in Table 1.

[5] The technical elements of the project application evaluated by CARB staff include existing emissions in the absence of the project [i.e., baseline], project emissions, input data and assumptions used for emissions and mitigation calculations, and quantification methods used in the Application.

Project Variant

In addition to the Proposed Project, one variant is also currently under consideration to allow for flexibility in the development of the BP project, referred to in this analysis as the Project Variant. The Applicant is including the Project Variant to ensure both the Proposed Project and the Project Variant would meet the AB 900 GHG reduction requirements and would receive AB 900 streamlining in the event the Project Variant is implemented. CARB's analysis considers the highest-emitting scenario among the Proposed Project and Project Variant. As shown in Tables 2 and 3 below, the Project Variant has higher emissions than the Proposed Project. For CARB's determination the Proposed Project and Project Variant have been evaluated. Consequently, the Project Variant, as well as the Proposed Project, would meet the AB 900[6] reduction requirements, if either is implemented.

Under the Project Variant, the number of dwelling units would be increased from 1,100 to 1,550 with the addition of 450 mid-rise apartment units, while the number of residential parking spaces would be increased with the addition of 100 parking spaces. The Project Variant would not include any public parking spaces.

Table 1: Baseline and Proposed Land Uses

Land Use	Existing Uses	Proposed Project	Project Variant
Residential	----	1,100 du (1,200,000 ft^2) 1,000 mid-rise apartments 100 townhouses	1,550 du (1,050,000 ft^2) 1,450 mid-rise apartments 100 townhouses
Retail	----	7,500 ft^2	7,500 ft^2
Daycare	----	10,000 ft^2	10,000 ft^2
Surface Parking	1,007 spaces (1,000,000 ft^2)	----	----
Parking Structure			
Residential	----	550 spaces (220,000 ft^2)	650 spaces (260,000 ft^2)
Public	----	750 spaces (300,000 ft^2)	----
Park	----	170,000 ft^2	170,000 ft^2

Notes:
ft^2 = square feet, du = dwelling unit
Source: as documented in Attachment 2.

[6] Both the Proposed Project and Project Variant would involve implementation of the transportation demand management (TDM) program as described in the AB 900 application (Please refer to Attachment 2)

6. Technical Review and Assessment

Ramboll, on behalf of the Applicant, prepared a GHG emissions assessment for the BP Project to demonstrate that the requirements of AB 900 can be met. The documentation for the Applicant's assessment is included in Attachment 2.

The Applicant used a variety of sources for activity data and emission factors to quantify GHG emissions and reduction measures. This CARB staff evaluation is focused on reviewing the data sources, emission factors, emission calculations, and assumptions used for the emissions quantification, and determining whether these sources and assumptions are reasonable.

The Applicant relied upon Version 2016.3.2 of the California Emissions Estimator Model (CalEEMod), a widely used emissions quantification model developed in coordination with local air districts to quantify criteria pollutant and GHG emissions from land use development projects in California. CalEEMod uses widely accepted sources for emission estimates combined with appropriate default data that can be used if site-specific information is not available. CalEEMod is populated with data from the United States Environmental Protection Agency AP-42 emission factors, CARB's on-road and off-road equipment emission models such as the EMission FACtor 2014 model (EMFAC2014), and the Off-road Emissions Inventory Program model (OFFROAD). The Applicant used the latest CalEEMod version in combination with BP Project-specific data, where available, correction factors to reflect future renewable electricity standards and CARB's EMFAC2017 mobile source emission factors, to calculate GHG emissions from BP Project construction and operation, as well as mitigation from the reduction measures that will be implemented by the Applicant.

7. Project Construction Emissions

Construction-related GHG emissions, including demolition-related emissions, are one-time direct emissions that would occur in two phases over the seven-year initial construction period. These emissions reflect the types of equipment expected and the number of hours of operation anticipated over the construction schedule, and include heavy-duty equipment, such as refuse hauling trucks, excavators, cranes, and conventional work vehicles. The Applicant estimated GHG emissions associated with BP Project construction by using the CalEEMod model. The Applicant used CalEEMod default settings to generate construction-related GHG emissions, with some exceptions that CARB staff has concluded are appropriate.

Table 2 shows BP Project GHG emissions generated by construction activities and indicates a total of 13,673 MT CO_2e over the BP Project construction period for the Proposed Project and 17,574 T CO2e for the construction of the Project Variant. CARB staff concluded that the methodology and estimated GHG emissions provided by the Applicant for construction are appropriate.

Table 2: Construction-Generated GHG Emissions (MT CO_2e/year)

Year	Electric Equipment[3]	Proposed Project		Project Variant	
		Diesel Equipment	Total	Diesel Equipment	Total
2021[1]	0	1,611	1,611	1,611	1,611
2022[1]	17.1	2,645	2,662	3,535	3,552
2023[1]	59.5	2,366	2,426	3,157	3,217
2024[2]	30.4	2,950	2,980	3,538	3,568
2025[2]	52.6	2,031	2,083	2,832	2,884
2026[2]	48.6	1,734	1,782	2,504	2,552
2027[2]	3	127	130	187	190
Total GHG emissions from construction			**13,673**		**17,574**

Notes:
Totals may not add due to rounding.
[1] Phase 1 of construction would begin March 1, 2021 and end August 31, 2024, with BP Project operations beginning September 1, 2024.
[2] Phase 2 of construction would begin September 1, 2024 and end January 31, 2027, with BP Project operations beginning February 1, 2027.
[3] Electric equipment emissions are the same for the Proposed Project and Project Variant; total emissions are the sum of electric and diesel equipment emissions.
ft^2 = square feet, du = dwelling unit
Source: as documented in Attachment 2.

8. Existing Baseline Operational Emissions

Existing baseline conditions represent the currently operational land uses (i.e., CCSF parking lot) located at the existing BP project site that would be demolished and removed as part of the BP Project. Operational activities and associated emissions in year 2018 serve as the baseline for purposes of this analysis, which represents existing conditions the year the California Environmental Quality Act (CEQA) Notice of Preparation of an EIR for the BP Project was filed. GHG emissions were quantified for mobile, electricity, natural gas, area, solid waste, water, and wastewater sources.

While the existing CCSF parking lot is currently operational and generates mobile source GHG emissions, it will be demolished and not replaced. However, when evaluating net emissions associated with the BP Project (i.e., the difference between the BP Project and existing baseline operational emissions), the Applicant has opted to conservatively assume no emissions are generated by the CCSF parking lot and that Existing Baseline operational emissions are zero. This increases the amount of net emissions attributed to the BP Project that must be reduced through a combination of onsite/offsite reduction measures and the procurement of GHG offset credits.

9. BP Project Operational Emissions

Operational GHG emission sources from the BP Project include mobile, electricity, natural gas, area, stationary, solid waste, water, and wastewater sources. The year of operational GHG emissions from full buildout of the BP Project was assumed to be

2027[7]. As the BP Project operational lifetime was assumed to be 30 years, the Application evaluates the years 2027 through 2056 for AB 900 net zero GHG compliance.

Mobile Source Emissions

Mobile source emissions were calculated using CalEEMod based on the land use types and sizes associated with the BP Project. The CalEEMod mobile source emission factors were updated to reflect the EMFAC2017 emissions model, while the trip generation rates were adjusted to account for reductions in BP Project trips as a result of the BP Project TDM program, as indicated in the *Balboa Reservoir AB 900 Transportation Assessment* prepared by Kittelson Associates (Attachment 2).

As the existing BP Project site currently serves as a 1,007-space overflow parking lot for CCSF and the Proposed Project would provide 750 public parking spaces, the Application mobile source analysis accounted for a reduction of 250 spaces. The Project Variant would have no public parking, resulting in a reduction of 1,007 public parking spaces.

Energy Emissions

The BP Project resides within Pacific Gas & Electric's (PG&E) domain. An emission factor of 538 pounds of carbon dioxide per megawatt-hour (lb/MW-h CO_2) was used for electricity emissions based on a 3-year average of PG&E's energy intensity for the years 2014 through 2016. As CalEEMod does not currently reflect the most current requirements from the Renewables Portfolio Standard (RPS), such as Senate Bill 100, the PG&E electricity emission factors associated with the BP Project were adjusted for future years, consistent with the procurement requirements under the RPS.

Area Source Emissions

Emissions from area sources, including equipment used to maintain landscaping, such as lawn mowers and trimmers, were estimated using CalEEMod default values. The only additional stationary source of emissions are two 300 kilowatt (kW) diesel emergency generators for the Proposed Project and six 300 kW generators for the Project Variant, which would provide emergency power primarily for lighting and other emergency building systems. Emissions of GHGs would be generated during

[7] The Proposed Project and Project Variant, whichever is selected as the preferred option, would be constructed in two overlapping development phases. Phase 1 of construction would begin March 1, 2021 and end August 31, 2024, with project operations beginning September 1, 2024. Phase 2 of construction would begin September 1, 2024 and end January 31, 2027, with full buildout expected to occur beginning February 1, 2027.

maintenance and testing operations and were estimated using CalEEMod default assumptions. Maintenance and testing would not occur daily, but rather periodically, up to 50 hours per year per CARB's Airborne Toxics Control Measure (ATCM) for Stationary Compression Ignition Engines (17 CCR 93115).

Solid Waste Emissions

Emissions from solid waste disposal were estimated using the CalEEMod model to reflect waste disposal and diversion rates consistent with the disposal rate data provided by CalRecycle.

Water and Wastewater Emissions

Emissions from water consumption were estimated using CalEEMod model defaults. The electricity usage related to water supply, treatment, distribution and wastewater treatment used the same statewide emission factors for electricity as were used for on-site electricity calculations.

Vegetation Emissions

The Proposed Project and Project Variant would replace the paved 1,007-space overflow parking lot for CCSF with buildings and vegetation. To account for the increase in trees and grassland, which sequester GHG emissions over their lifetime, associated with the Proposed Project and Project Variant, emissions were calculated consistent with CalEEMod methods.

10. Net Greenhouse Gas Emissions

As summarized in Table 3, annual BP Project construction and operational emissions would exceed baseline throughout the lifetime of the Proposed Project and Project Variant. Further, construction and operation of the Project Variant, which would result in the greatest amount of GHG emissions, would result in an estimated net increase of 111,650 MT CO_2e over the project's operational life (30 years)[8].

CARB staff evaluated the BP Project's emission calculations, demand factors, and assumptions used to estimate operational GHG emissions and concluded that the methodology and estimated operational GHG emissions provided by the Applicant are appropriate.

[8] The Proposed Project would result in an estimated net increase of 90,993 MT CO_2e over the project's 30-year operational life.

Table 3: Year-by-Year Proposed Project and Project Variant GHG Emissions

Year	GHG Emissions (MT CO_2e/year)			
	Proposed Project		Project Variant	
	Construction	Operation	Construction	Operation
2021[1]	1,611	----	1,611	----
2022[1]	2,662	----	3,552	----
2023[1]	2,425	----	3,217	----
2024[2]	2,981	2,003	3,568	2,295
2025[2]	2,083	1,949	2,884	2,230
2026[2]	1,782	1,899	2,552	2,167
2027[2]	130	3,193	190	3,833
2028	----	3,110	----	3,736
2029	----	3,031	----	3,644
2030	----	2,956	----	3,558
2031	----	2,884	----	3,474
2032	----	2,813	----	3,395
2033	----	2,745	----	3,316
2034	----	2,680	----	3,242
2035	----	2,616	----	3,169
2036	----	2,554	----	3,100
2037	----	2,492	----	3,032
2038	----	2,433	----	2,966
2039	----	2,375	----	2,901
2040	----	2,317	----	2,838
2041	----	2,261	----	2,775
2042	----	2,206	----	2,714
2043	----	2,150	----	2,653
2044	----	2,096	----	2,594
2045	----	2,043	----	2,534
2046	----	2,040	----	2,532
2047	----	2,051	----	2,542
2048	----	2,050	----	2,540
2049	----	2,048	----	2,538
2050	----	2,047	----	2,537
2051	----	2,047	----	2,537
2052	----	2,047	----	2,537
2053	----	2,047	----	2,537
2054	----	2,047	----	2,537
2055	----	2,047	----	2,537
2056	----	2,047	----	2,537
Sub Total	13,673[3]	77,320[3]	17,574[3]	94,076[3]
Total (Construction + Operations)	**90,993**		**111,650**	

Notes:
Totals may not add due to rounding.
[1] Phase 1 of construction would begin March 1, 2021 and end August 31, 2024, with BP Project operations beginning September 1, 2024.
[2] Phase 2 of construction would begin September 1, 2024 and end January 31, 2027, with BP Project operations beginning February 1, 2027.
[3] Applicant commits to purchase GHG offset credits in an amount sufficient to offset net increase in operation-related GHG emissions. The BP Project would obtain GHG offset credits issued by an accredited carbon registry.
GHG = greenhouse gas; MT CO_2e = Metric tons carbon dioxide equivalent.
Source: as documented in Attachment 2.

11. Method to Reduce and Offset Emissions

Under the GHG quantification methodology used by the Applicant, construction and operation of the Project Variant, which would create in the greatest amount of GHG emissions, would result in an estimated net increase of 111,650 MT CO_2e, as summarized in Table 3[9]. Operational emissions would be on-going for the BP Project analysis time horizon (defined as 30 years), and would be expected to decline over the life of the BP Project as emissions decline with the adoption of lower-GHG-emitting vehicle technologies and renewable sources of electricity. The Applicant has demonstrated that it would meet the requirement set forth in California Public Resources Code pursuant to AB 900.

The Applicant has agreed to meet the requirement set forth in California Public Resources Code section 21183, subdivision (c) to demonstrate that the Proposed Project or Project Variant, whichever is adopted, would result in no net additional GHG emissions through the purchase of GHG offset credits issued by an accredited carbon registry, consistent with policy recommendations included in CARB's 2017 Climate Change Scoping Plan Update[10].

The BP Project would include many design features that would reduce GHGs whose reductions are not explicitly quantified in the Application because details on the measures are not known at this time. The Applicant indicates GHG emissions could be reduced further through on-site mitigation measures such as installing additional solar panels, electric vehicle charging stations, and other design elements. Consequently, the analysis of GHG emissions, reductions, and GHG offset credits presented in the Application and summarized in this Staff Evaluation represent the upper bound in terms of GHG emissions associated with the BP Project. Design features under consideration that are not reflected in the BP Project Application GHG analysis include the following:

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[9] The Proposed Project would result in an estimated net increase of 90,993 MT CO_2e over the project's 30-year operational life.
[10] https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf

Energy

The BP Project would establish a sustainability plan that outlines performance and monitoring criteria for its operation. As part of the sustainability plan, the Applicant would evaluate renewable energy approaches to be included in the BP Project, and the BP Project would comply with the state's Title 24 and San Francisco Green Building Code requirements for energy efficiency, renewable energy, and solar and living roofs.

Credits for reducing overall consumption and phasing out natural gas use across buildings and renewable energy infrastructure and maximizing fossil-free power, generation, and storage onsite. In addition to the baseline code requirement to meet Title 24 and meet LEED's requirement to exceed ASHRAE 90.1-2010 by 5%, the project is exploring the following opportunities for increasing energy efficiency:

- Only including gas fired boilers for domestic hot water (DHW),
- Utilizing electric heat pump water heating,
- Including electric resistance stoves and clothes dryers
- Including electric resistance heaters for space heating for affordable housing buildings and heat pumps for market rate buildings

Additional energy measures such as Enhanced building envelope, natural ventilation for passive cooling are also being evaluated

Renewable Energy

The project will also, at a minimum, meet the San Francisco Better Roofs Ordinance to dedicate 15% to solar and/or 30% to green roofs and is exploring opportunities for utilizing renewable energy through high performance envelope and energy efficient building systems, initiatives for affordable housing to beat Title 24 by 10%, dedicating the maximum possible roof space to solar thermal and solar PV, evaluating building integrated PV -solar shading, utilizing solar thermal hot water heating systems and evaluating the San Francisco Public Utilities Commission (SFPUC) as a utility provider for purchasing green power.

Water Efficiency

The project is exploring opportunities for utilizing recycled water or greywater for all irrigation and for toilet flushing in market rate buildings and utilizing ultra-low-flow fixtures that are more efficient than CALGreen requires.

GHG Offset Credits

To the extent carbon offsets are used to mitigate GHG emissions from the BP Project, the Project Applicant will purchase GHG offset credits issued by an accredited carbon registry. As indicated above, the BP Project would include many other features that would reduce GHGs, and GHG reductions from these features are not explicitly quantified in the Application because details on the measures are not known at this time. Therefore, the analysis of GHG emissions, reductions, and GHG offset credits presented in the Application and summarized in this Staff Evaluation represent the upper bound in terms of GHG emissions associated with the BP Project Applicant that must be reduced via GHG offset credits to meet the AB 900 net zero GHG requirement. The Applicant commits to purchase 111,650 MT of GHG offset credits (17,574 MT from construction and 94,076 from operation) for the Project Variant, and 90,993 MT of GHG offset credits (13,673 MT from construction and 77,320 from operation) for the Proposed Project, regardless of any project design or any other GHG reduction features ultimately implemented as part of the Proposed Project that could reduce GHG emissions further.

Contracts to purchase GHG offset credits for the construction emissions attributable to that phase shall be entered into prior to the issuance of grading permits for construction of each phase of the BP Project, while contracts for GHG offset credits will be entered into prior to issuance of the final Certificate of Occupancy for the first building constructed in each phase of the BP Project to offset the net increase in operational emissions.

Commitments to enter into contracts to offset net additional GHG emissions will be incorporated as conditions of BP Project approval under Public Resources Code Section 21183(e), which shall be binding and enforceable by the Lead Agency. The Contracts to purchase GHG offset credits for the construction emissions attributable to that phase shall be entered into prior to the issuance of grading permits for construction of each phase of the BP Project, while contracts for GHG offset credits will be entered into prior to issuance of the final Certificate of Occupancy for the first building constructed in each phase of the BP Project to offset the net increase in operational emissions. The applicant shall promptly submit copies of any executed contracts for purchased GHG offset credits to CARB and the Governor's office.

12. Conclusions and Recommendations

Based on an evaluation of the documentation provided by the Applicant and its commitment to purchase GHG offset credits issued by an accredited carbon registry, CARB has concluded that the BP Project, both the Proposed Project and Project Variant, would not result in any net additional GHG emissions relative to the baseline.

ATTACHMENT 2

Greenhouse Gas Emissions Methodology Documentation for Environmental Leadership Development Project Application

Balboa Reservoir Mixed Use Project

(Application submitted on June 17, 2019, and clarifying documentation submitted on October 22, November 14, December 12, and December 17, 2019)

Environmental Leadership Development Project Application

Balboa Reservoir Mixed-Use Project

San Francisco, CA

June 2019

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INTRODUCTION

The Project Sponsor, Reservoir Community Partners, LLC,[1] is submitting this Application for certification of the Balboa Reservoir Mixed-Use Project as an Environmental Leadership Development Project (ELDP), pursuant to AB 900, the Jobs and Economic Improvement through Environmental Leadership Act of 2011, as amended effective January 1, 2018, and codified in Public Resources Code Section 21178 et. seq. Although codified within the California Environmental Quality Act (CEQA), the process for certification of the project as an ELDP is separate from all but a few of the steps required for preparing a CEQA environmental review document.

PROJECT DESCRIPTION

Proposed Development Project

The project site, an approximately 17.6-acre parcel in San Francisco's West of Twin Peaks area, is proposed to be developed with mixed-income housing, open space, childcare facilities, a community room available for public use, retail space, on- and off-street parking; as well as new streets, utilities, and other infrastructure.

The project site is currently owned by the City and County of San Francisco under the jurisdiction of the San Francisco Public Utilities Commission (SFPUC). The City, acting by and through SFPUC, selected Reservoir Community Partners, LLC to act as master developer for the project site. The current project site is a surface parking lot for City College which contains approximately 1,007 vehicular parking spaces. The lot provides overflow vehicular parking for City College students, faculty, and staff.

Reservoir Community Partners, LLC (the project sponsor) is proposing to redevelop the site with up to approximately 1.8 million gross square feet (gsf) of uses, including between approximately 1.3 million gsf of residential space (1,100 dwelling units plus residential amenities, approximately 10,000 gsf of community space (childcare and a community room for public use), approximately 7,500 gsf of retail, up to 550 residential parking spaces and up to 750 public parking spaces. Collectively this is referred to as the Project. The City has also requested evaluation of a Project Variant which increases the number of dwelling units to 1,550 and the number of residential parking spaces to 650. The Project Variant would not include public parking spaces.

Table 1 compares the Baseline, Project, and Project Variant land uses.

Table 1: Updated Land Use Program

Land Use	Baseline[2]	Project	Project Variant
Apartments Mid Rise	N/A	1,000 dwelling units	1,450 dwelling units
Condo/Townhouse	N/A	100 dwelling units	100 dwelling units
Commercial (retail)	N/A	7,500 ft^2	7,500 ft^2
Community facilities (childcare and community room for public use)	N/A	10,000 ft^2	10,000 ft^2
Enclosed Parking with	N/A	550 residential	650 residential

[1] A joint venture between BRIDGE Housing Corporation [a non-profit affordable housing developer] and Avalon Bay Communities.

[2] The existing parking lot conditions are not quantified, as they are expected to be minimal for GHG emissions. The Baseline scenario is conservatively excluded from the analysis.

Land Use	Baseline[2]	Project	Project Variant
Elevator		spaces 750 public spaces	spaces 0 public spaces
Public Open Space	N/A	4 acres	4 acres
Parking Lot	1,007 spaces	N/A	N/A

In both options, the buildings would range in height from 25 to 78 feet. Approximately 4 acres would be devoted to publicly accessible open space under each option. SFPUC would retain ownership of an 80-foot wide strip of land located along the southern edge of the site where an underground water transmission pipeline is located.

The Project would amend the general plan, including the Balboa Park Station Area Plan (the area plan), and the planning code, adding a new Balboa Reservoir Special Use District. The special use district would establish land use zoning controls and incorporate design standards and guidelines for the site. The San Francisco Zoning Map would be amended to show changes from the current zoning (P [Public]) to the proposed special use district and would modify the existing height limits of 40 to 65 feet to heights of up to 78 feet. **Attachment A,** Project Drawings, provides a site plan, and representative floor plans of proposed buildings. **Attachment B,** Project Photo- simulations, presents the Project in context of existing surrounding streets and buildings.

The Project would include transportation and circulation changes, including the extension of existing north-south Lee Avenue across the site, and a new internal street network. The project would design the roadway network to be accessible for people walking, including people with disabilities, bicycling, and driving. The project would also add new utility infrastructure to supply the site with potable water, wastewater collection, storm water collection and treatment, electricity, natural gas, and communications.

The proposed parking programs for both project options would include off-street and on-street parking options, as follows:

- The Project would provide up to 550 off-street residential parking spaces, which would be located in parking garages below grade at Blocks C, D, F, H and I and in the townhomes. The Project would also include 750 public off-street parking spaces in a below-grade multi-level public garage under Blocks A and B and accessed from South Street. A minimum of seven car-share parking spaces located on streets and in buildings would also be provided
- The Project Variant would provide up to 650 off-street residential parking spaces, which would be located in parking garages at or below grade at Blocks A, B, C, D, F, H, I, and J. A public parking garage is not proposed as part of this option. A minimum of 12 car-share parking spaces located on streets and in buildings would also be provided.

In addition, the Project would include off-street freight loading spaces, truck loading parking spaces, accessible parking spaces, and passenger loading areas. With the exception of the townhomes, all residential parking would be unbundled.

The 4 acres of open space would include a 2-acre Central Park, SFPUC Open Space, and 0.3-acre Gateway Park. The Project would also include balconies, rooftops, and courtyards accessible only to building occupants, as well as privately owned public open spaces.

To meet the objectives of the San Francisco General Plan (the general plan) to maximize affordable housing and housing in transit-rich neighborhoods, the City proposed a Project Variant, which increases the residential space to approximately 1.5 million gsf of residential space (1,550 dwelling units plus residential amenities). The Project Variant would include up to 650 residential parking spaces (with no

public parking spaces). The buildings would range in height 25 to 88 feet. The Project Variant would also amend the general plan, except that it would modify the existing height limits of 40 to 65 feet to heights of up to 88 feet. All other land uses would be the same for the Project Variant as described for the Project.

The proposed project options would be constructed in two continuous development phases, with full build-out expected to occur approximately six years after project entitlements, if executed from start to finish of the prescribed development phases.

The Project would include a transportation demand management (TDM) program that would implement measures to reduce vehicle trips and encourage sustainable modes of transportation. TDM measures may include both physical (e.g., bicycle and car share parking) and programmatic (e.g., incentives). The project sponsor has committed to meeting and exceeding the requirements of the San Francisco Green Building Ordinance (part of the San Francisco Building Code) by achieving Leadership in Energy and Environmental Design (LEED) for Neighborhood Development certification at a minimum Gold level for the full development. In addition, the Project would establish a sustainability plan that outlines performance and monitoring criteria for its operation. The project would comply with the state's Title 24 and San Francisco Green Building Code requirements for energy efficiency, renewable energy, and solar and living roofs. The project sponsor would evaluate renewable energy approaches as part of the sustainability plan to be included in the Project.

The Project would include affordable housing. A total of up to 50 percent of the new units would be designated affordable to persons earning between 55 and 120 percent of the area median income and would be distributed throughout the site.

Existing Project Site

The Balboa Reservoir is currently an asphalt-paved surface parking lot originally constructed in 2010 by City College. The approximately 17.6-acre project site encompasses Assessor's Block 3180/Lot 190 in the Twin Peaks area of San Francisco. The rectangular parcel is bounded by City College to the east, Archbishop Riordan High School to the north, the Westwood Park neighborhood to the west, and multi-family residential development along Ocean Avenue to the south.

The site currently contains 1,007-space surface vehicular parking spaces and does not contain any permanent structures. The lot provides overflow parking for City College students, faculty, and staff. A cargo storage container is located on the west side of the site, at the foot of the berm slope. The parking lot is entirely paved with no vegetation. The western and northern slopes contain scattered trees and shrubs, with paved pathways along the tops of these slopes. Paved walkways, stairs, vegetation, and lighting are located on the eastern slope, providing pedestrian connections between the project site and adjacent City College property containing parking and the Multi-Use Building.

The site is close to the Balboa Park Bay Area Rapid Transit (BART) Station and to San Francisco Municipal Transportation Agency (Muni) transit service including stops at Ocean and Lee avenues (e.g., the KT Ingleside/ Third Street Muni line, the 29 Sunset, the 91 Third Street and K Owl), stops at City College Loop (e.g., the 8 Bayshore, 8BX Bayshore Express, and 49 Van Ness/Mission), stops at the Balboa Park BART Station (e.g., the KT-Ingleside/Third Street, K Owl, J M light rail lines, and bus routes 43 Masonic, 54 Feon, 88 BART Shuttle, 8 Bayshore, 8BX Bayshore, 49 Van Ness/Mission, and 91 Third Street).

The area in the general vicinity of the project site consists primarily of residential, mixed-use, commercial, and educational/institutional uses. The educational/institutional buildings of Archbishop Riordan Highschool and City College Ocean Campus are adjacent to the project to the north and east. To the west is the Westwood Park residential neighborhood, which includes approximately 650 bungalow-style homes, from the 1920s. South of the project site are three multi-family mixed-use commercial and

residential buildings that include Whole Foods Market and other neighborhood-serving retail uses along Ocean Avenue and four stories of residential units above.

CONSISTENCY WITH STATUTORY REQUIREMENTS FOR CEQA STREAMLINING

This Application was prepared in accordance with the Governor's Guidelines for Streamlining Judicial Review under CEQA, provided on the Governor's Office of Planning and Research (OPR) website and updated in January 2018 to comply with Senate Bill 734 (2016) and Assembly Bill 246 (2017).[13] The following information (including all Attachments) is submitted to show that the project and variant each satisfies the statutory requirements for CEQA streamlining, as further set forth in the Governor's Guidelines, pursuant to Public Resources Code Section 21187 *et seq*.

1. Information to show the project or variant is residential, retail, commercial, sports, cultural, entertainment, or recreational in nature.

The Project is residential and retail in nature. As explained above, the Project would have approximately 1,100 dwelling units, up to 7,500 gross square feet of commercial (retail) floor area, and a 10,000 gross square feet of community facilities (childcare and community room for public use), in addition to 1,300 parking spaces, circulation and loading space, and approximately 4 acres of open space. The Project Variant would include 1,500 dwelling units, 7,500 gross square feet of commercial (retail) floor area, and a 10,000 gross square feet of community facilities (childcare and community room for public use) in addition to 650 parking spaces and circulation and loading space and open space similar to the Project.

The site plans for the Project and Project Variant are included in **Attachment A**. Several renderings of the Project in the existing urban context are shown in **Attachment B**.

2. Information to show that the project or variant, upon completion, will qualify for LEED Gold Certification or better. The Application shall specify those design elements that make the project or variant eligible for LEED Gold Certification, and the Applicant shall submit a binding commitment to delay the project or variant until it receives LEED Gold Certification or better. If, upon completion of construction, LEED Gold Certification or better is delayed as a result of the certification process rather than a project deficiency, the Applicant may petition the Governor to approve project operation pending completion of the LEED certification process.

The design for the Project or Project Variant would meet or exceed current uniform codes and is created to achieve at the minimum a Leadership in Energy and Environmental Design (LEED) Neighborhood Development (ND) Gold rating. The LEED ND certification has four certification levels that correspond to the number of credits that are achieved in five categories: Smart Location and Linkage (SLL), Neighborhood Pattern and Design (NPD), Green Infrastructure and Buildings (GIB), Innovation (IN), and Regional Priority (RP).

LEED provides a level of flexibility for projects to choose the credits and project features that will contribute to certification. The Project and Project Variant will each integrate low-impact development and transportation demand management, energy efficiency, water conservation, and other green-building practices to achieve a minimum LEED ND Gold certification; however, at the time of submitting this Application, the exact LEED credits that would contribute to the achievement of LEED ND Gold certification (i.e., 60-79 LEED points) have not yet been determined. That said, most or all the following

[3] Governor's Office of Planning and Research, *Governor's Guidelines for Streamlining Judicial Review under the California Environmental Quality Act Pursuant to AB 900 (Chapter 352, Statutes of 2011)*, available at http://opr.ca.gov/docs/20180103-AB_900_Guidelines_January_2018.pdf. Accessed July 11, 2018.

features will contribute to LEED certification.

- **Climate and Air Quality.** Credits for reducing greenhouse gas (GHG) emissions associated with refrigerants and ensuring indoor air quality. The project is exploring opportunities to reduce the use of high-impact refrigerants and/or total refrigerants in HVAC systems to meet the LEED v4 BD&C credit requirements for refrigerant reduction. In addition to the baseline code requirement to meet the ASHRAE 62.2 ventilation requirements, the project is exploring opportunities for meeting the LEED v4 Minimum Indoor Air Quality Performance, which requires compliance with ASHRAE 62.1-2010 and Title 24. The project is also exploring including balanced ventilation in residential units, using low-emitting materials. Additional air quality measures such as Enhanced Indoor Air Quality Strategies from LEED (filtration, monitoring) are also being evaluated.

- **Energy.** Credits for reducing overall consumption and phasing out natural gas use across buildings and renewable energy infrastructure and maximizing fossil-free power, generation, and storage onsite. In addition to the baseline code requirement to meet Title 24 and meet LEED's requirement to exceed ASHRAE 90.1-2010 by 5%, the project is exploring the following opportunities for increasing energy efficiency:
    - Only including gas fired boilers for domestic hot water (DHW),
    - Utilizing electric heat pump water heating,
    - Including electric resistance stoves and clothes dryers
    - Including electric resistance heaters for space heating for affordable housing buildings and heat pumps for market rate buildings.

  Additional energy measures such as Enhanced building envelope, natural ventilation for passive cooling are also being evaluated.

- **Renewable Energy.** The project will also, at a minimum, meet the San Francisco Better Roofs Ordinance to dedicate 15% to solar and/or 30% to green roofs and is exploring opportunities for utilizing renewable energy through high performance envelope and energy efficient building systems, initiatives for affordable housing to beat Title 24 by 10%, dedicating the maximum possible roof space to solar thermal and solar PV, evaluating building integrated PV - solar shading, utilizing solar thermal hot water heating systems, and evaluating the San Francisco Public Utilities Commission (SFPUC) as a utility provider for purchasing green power.

- **Water Efficiency.** Credits for maximizing water efficiency. Baseline code requirements for the Project include prescriptive flush/flow rates for indoor fixtures (AB-093), satisfy 100% flushing and irrigation demands with non-potable water for buildings 250,000 square feet and larger that are not low income (Non-potable Water Use Ordinance), and comply with the Model Water Efficient Landscape Ordinance (MWELO) for landscape irrigation (AB-093). Additionally, the project is exploring opportunities for utilizing recycled water or greywater for all irrigation and for toilet flushing in market rate buildings and utilizing ultra-low-flow fixtures that are more efficient than CALGreen requires.

- **Materials and Resources.** Credits for Construction and Demolition Waste Management. Baseline code requirements include the San Francisco Recycling and Composting Ordinance to include space for collecting and loading recycling and compost as well as recycling 65% of construction and demolition debris (AB-093). In addition, the project is exploring opportunities for providing adequate waste storage and collection facilities for tenants (3-bin system), collaborating with neighboring colleges and businesses, providing at least one drop-off point for all occupants to dispose of potentially hazardous office or household waste for proper collection and disposal, providing grocery bags to tenants, and increasing construction and demolition recycling to 75%. Additional ways to address materials and resources could include achieving points in the following credits: Environmental Product Declarations, Sourcing of Raw Materials,

and Material Ingredients.

- **Location and Transportation.** Credits based on the Project or Project Variant being located on a currently developed site with surrounding density and diverse land uses to promote walkability and transportation efficiency and for access to high quality transit. Local transit service to the project area is provided by the San Francisco Municipal Railway (Muni)in the form of above-ground trolley (light rail), and above-ground route bus services, as well as by BART. The Project would locate the functional entries of the project within a mile walking distance of a BART station and light rail and bus stops.

Because final LEED certification is not granted until a project is completed and operational, the project sponsor will petition the Governor to approve construction and project operation pending completion of the certification process, as permitted under Public Resources Code Section 21178 et seq.

3. Information to show the project or variant will achieve at least 15 percent greater transportation efficiency, as defined in Public Resources Code section 21180(c), than comparable projects. The Applicant shall provide information setting forth its basis for determining and evaluating comparable projects and their transportation efficiency, and how the proposed project will achieve at least 15 percent greater transportation efficiency. For residential projects, the Applicant shall also submit information demonstrating that the number of vehicle trips by residents divided by the number of residents is 15 percent more efficient than for comparable projects. For the purpose of this provision, comparable means a project of the same size, capacity, and location type.

The *AB 900 Transportation Assessment* for the Balboa Reservoir, dated April 22, 2019, provides detailed trip generation calculations and other information about the Project and Project Variant options as well as a comparison with vehicle trips generated by a comparable project. The *AB900 Transportation Assessment* is attached to this Application as **Attachment C, AB900 Transportation Assessment**, and is summarized here.

The proposed project options would replace the existing 1,007 surface parking spaces with a mix of neighborhood-serving commercial uses (day care and retail) that would provide convenient local destinations for the development project's residents, without having to drive to other locations.

The project site is located close to pedestrian networks and bicycle facilities, major transit services, convenient neighborhood shopping including a full-service grocery store, and a diversity of land uses. The project site is in a highly-walkable area of San Francisco with an established pedestrian network. Facilities for people walking are mostly complete in the area, with sidewalks provided continuously on both sides of the streets and crosswalks provided at most intersections.

The proposed project options are close to major transit services. Muni operates eight bus routes and one light-rail line with stops located within one half mile of the project site (8 Bayshore, 8BX California 'B' Express, 23 Monterey, 28R 19th Avenue Rapid, 29 Sunset, 43 Masonic, and 54 Felton), and K Ingleside light rail. The bus stops are located at a local transit hub is provided at the City College Terminal located at the northwest corner of Ocean Avenue/Frida Kahlo Way/Geneva Avenue,

The project site is also served indirectly by a network of regional transportation facilities that provide access to the greater Bay Area. Regional transit provides service to the East Bay and Peninsula via BART, with connection to the South Bay via BART with transfer to Caltrain. BART is located within walking distance of the project site and many Muni routes connect to the Balboa Park BART/Muni Station, which is about 0.5 mile away from the project site.

PROJECT AND VARIANT TRIP GENERATION

The Project, with 1,100 residential units, 7,500 gross square feet of commercial/retail space, a 10,000 square foot community/child care center, and 1,300 off-street vehicle parking spaces, would generate approximately 2,397daily vehicle trips.

The Project Variant would have the same land uses as the Project, with the exception that 750 off-street vehicle parking spaces would not be included and in its place an additional 400 residential units would be constructed, for a total of 1,500 dwelling units on the site. The Project Variant would generate approximately 3,107 daily vehicle trips.

COMPARABLE PROJECT TRIP GENERATION

To analyze the transportation efficiency of the Project and the Project Variant, the projects' vehicle trip generation was examined against that of a comparable development, which represents a baseline case. For the purpose of this assessment, the comparable project has the same land uses and quantities (size/number of units) as the Project and Project Variant, but does not have the design-specific characteristics as the Project and Project Variant that would lead to trip reductions. Specifically, trip reductions due to the removal of existing uses are associated with the infill nature of the site and would therefore be applicable to the Project and Project Variant only and would not be applicable to the comparable project. Similarly, trip reductions due to the transportation demand management (TDM) program are considered to be design-specific benefits and therefore would be applicable to the Project and Project Variant and not to the comparable project.

The comparable project that corresponds to the Project would generate 3,441 total daily vehicle trips. The comparable project that corresponds to the Project Variant would generate 4,460 total daily vehicle trips.

TRANSPORTATION DEMAND MANAGEMENT (TDM) PROGRAM

The project sponsor will be required to implement a Transportation Demand Management (TDM) Program to encourage the use of non-auto modes and reduce vehicle trips, pursuant to San Francisco Planning Code section 169.

Based on the analysis included in the CAPCOA Report,[4] measures from the TDM Program could reduce vehicle trips approximately 30% as follows:

1. Improve Biking/Walking Network- 1%
2. Provide Bicycle Parking- 0.6%
3. Implement Car Share Program- 5%
4. Unbundle Parking- 4.3%
5. Limit On-Site Parking Supply- 8.8%
6. Improved Design of Development- 10.7%

As described, the measures in the project's TDM Program would reduce vehicle trips and have been considered in calculating trip generation for the Project and Project Variant.

Elimination of Existing Parking

The project site is currently occupied by a surface parking lot with 1,007 vehicle parking spaces. Both driveway counts and parking inventory and occupancy data were collected when City College was in session. The site was estimated to generate a total of 644 daily vehicle trips. Because the Proposed Project would replace 750 of the

[4] California Air Pollution Control Officers Association (CAPCOA), Quantifying Greenhouse Gas Mitigation Measures, August 2010

1,007 public parking spaces (74%), the existing activity was reduced by 74% to account for the existing trips that would continue to access parking on the site. This level of activity (167 vehicle trips) represents a 5.1% reduction in daily vehicle trips when compared with the Proposed Project's comparable project. This existing activity (644 vehicle trips) represents an 11.4% reduction in daily vehicle trips when compared with the Project Variant's comparable project.

TRIP GENERATION COMPARISON SUMMARY

To compare the overall trip generation of the Project and the Project Variant to the comparable projects, the trip generation estimates for the Project and the Project Variant were adjusted to account for existing uses and the TDM program.

As shown in the following tables both the Project and the Project Variant would result in a decrease in vehicle trip generation compared to the respective comparable projects. Table 2, Project shows that the Project would generate 1,044 fewer daily vehicle trips. This equates to a 30.3 percent decrease in daily vehicle trips.

The development of the Project would also decrease trips to the City College as a result of the decrease in vehicle trips. When taking into account this decrease in trips, the Project would decrease an additional 167 trips, for a total of 1,211 fewer daily trips.

Table 2: Transportation Efficiency Comparison for Project

Project	Land Use	Size	Total Daily Vehicle Trips
Comparable Development	Residential	1,100 dwelling units	3,441
	Commercial (Retail)	7,500 gsf	
	Community facilities (childcare and community room for public use)	10,000 gsf	
Project including TDM	Residential	1,100 dwelling units	2,397
	Commercial (Retail)	7,500 gsf	
	Community facilities (childcare and community room for public use)	10,000 gsf	
	Vehicle Trip Decrease	--	**1,044**
	Percent Decrease		**30.3%**
Project including TDM and Reduction from Existing Trips	**Vehicle Trips**		**2,230**
	Vehicle Trip Decrease		**1,211**
	Total Percent Decrease		**35.2%**

Source: AB 900 Transportation Assessment; Kittelson & Associates, Inc., 2019

As shown in Table 3, it is estimated that there would be 1,354 fewer daily vehicle trips generated compared to the comparable project, which corresponds to a 30.4percent decrease.

The development of the Project Variant would also decrease trips to the City College as a result of the decrease in vehicle trips. When taking into account this decrease in trips, the Project Variant would decrease an additional 644 trips, for a total of 1,998 fewer daily trips.

Table 3: Trip Generation Comparison for Project Variant

Project	Land Use	Size	Total Daily Vehicle Trips
Comparable Development	Residential	1,500 dwelling units	4,460
	Commercial (Retail)	7,500 gsf	

	Community facilities (childcare and community room for public use)	10,000 gsf	
Project Variant including All TDM	Residential	1,500 dwelling units	3,107
	Commercial (Retail)	7,500 gsf	
	Community facilities (childcare and community room for public use)	10,000 gsf	
Project including TDM and Reduction from Existing Trips	**Vehicle Trip Decrease**	--	**1,354**
	Percent Decrease		**30.2%**
	Vehicle Trips		**2,462**
	Vehicle Trip Decrease		**644**
	Total Percent Decrease		**44.8%**

Source: AB 900 Transportation Assessment; Kittelson & Associates, Inc., 2019

CONCLUSION

The effects of the project's TDM measures would reduce the anticipated daily vehicular trip generation estimates by approximately 30.4 percent as compared to a comparable mixed-use project. Therefore, the proposed project options would exceed the 15 percent greater transportation efficiency threshold for an Environmental Leadership Development Project.

4. Information to show that the project is located on an infill site as defined at Public Resources Code Section 21061.3, and in an urbanized area, as defined at Public Resources Code Section 21071.

The project site is located in San Francisco on an infill site surrounded by existing residential, commercial, and institutional development. An infill site is defined in Public Resources Code section 21061.3 as a site that "has been previously developed for qualified urban uses." A "qualified urban use" is defined in Public Resources Code section 21072 as "any residential, commercial, public institutional, transit or transportation passenger facility, or retail use, or any combination of those uses." The project site meets this definition as it is currently a surface parking lot.

The project site is located in an urbanized area as defined in Public Resources Code section 21071, as it is in "an incorporated city" that has a population of at least 100,000 persons. The City and County of San Francisco is an incorporated city that has an estimated population of 884,363 according to the 2017 estimates prepared by the United States Census Bureau.

Thus, the proposed Project and Project Variant would be an urban infill development because it is located on an infill site previously developed with a qualified urban use in an urbanized area.

5. Information required by Public Resources Code section 21180(b)(1) is available for projects within a metropolitan planning organization for which a sustainable communities strategy or alternate planning strategy is in effect. For the purposes of this provision, "in effect" means that the sustainable communities strategy or the alternative planning strategy has been adopted by the metropolitan planning organization, and that the Air Resources Board has accepted the metropolitan planning organization's determination that the sustainable communities strategy or alternative planning strategy meets the adopted greenhouse gas reduction targets and is not the subject of judicial challenge.

Senate Bill (SB) 375 was adopted by the legislature in August 2008 and signed into law by the Governor in September 2008. This legislation links regional planning for housing and transportation with the

greenhouse gas (GHG) reduction goals in Assembly Bill 32. Each Metropolitan Planning Organization is required to adopt a Sustainable Communities Strategy to encourage compact land development to reduce passenger vehicle miles traveled and vehicle trips so that the region will meet targets established by the California Air Resources Board (CARB) for reducing GHG emissions. In September 2010, CARB adopted regional GHG targets for passenger vehicles and light trucks for the years 2020 and 2035 for the various Municipal Planning Organizations in California. Two climate protection targets were established for the San Francisco Bay Area by CARB: a per capita reduction of GHG emissions by 7 percent by year 2020 and 15 percent by year 2035.[5]

The project is within the jurisdiction of the Association of Bay Area Governments (ABAG). ABAG and the Metropolitan Transportation Commission (MTC) published the draft Plan Bay Area, the region's proposed Regional Transportation Plan/Sustainable Communities Strategy, in 2010. ABAG and MTC adopted the final Sustainable Communities Strategy in 2013 and submitted the final Plan Bay Area, containing the final Sustainable Communities Strategy, to CARB in early 2014. The supporting documentation for the Sustainable Communities Strategy shows that the Plan would accomplish a 10 percent per capita carbon dioxide emissions reduction from passenger vehicles by 2020 and a 16 percent per capita reduction by 2035. CARB Executive Order G-14-028, approved in April 2014, indicated that the CARB accepted ABAG's quantification of GHG emissions from the Sustainable Communities Strategy and determined that if implemented, Plan Bay Area would achieve the established reduction targets in compliance with SB 375. Plan Bay Area was challenged in court in 2014 in multiple actions; each of the challenges has either been settled or the Plan was upheld in the courts.

More recently, MTC and ABAG prepared and adopted Plan Bay Area 2040 in July 2017, containing updates to the original Plan Bay Area based on new forecasts of regional population and employment growth and distribution using upgraded models, and on adjusted approaches to some GHG reduction strategies based on surveys of their effectiveness. The basic land use and transportation strategies from the 2013 Sustainable Communities Strategy remain, promoting infill development with higher densities and more multi-family housing in mixed-use communities focused on neighborhoods with transit. Transportation strategies focus on enhancing transit and improving roadways, with more high-occupancy vehicle lanes and toll lanes.

Plan Bay Area 2040 would exceed the GHG emissions target established by the CARB in 2010, achieving a 16 percent reduction by the year 2035 and an 18 percent reduction in emissions between 2005 and 2040, according to the *Performance Assessment Report* for Plan Bay Area 2040, published by ABAG and MTC in July 2017 [p. 11]. CARB staff reviewed Plan Bay Area 2040 and approved a technical evaluation of the GHG reduction quantifications in June 2018.[6]

Plan Bay Area focuses on where the region is expected to grow and what transportation investments will support that growth. It encourages infill development and multifamily development particularly close to public transit and in walkable neighborhoods. The Project or Project Variant, once approved, will be consistent with the "general use designation, density, building intensity, and applicable policies specified for the project area in …a sustainable communities strategy" as required in Public Resources Code section 21180(b)(1). The development program provides for reasonable-density infill development in a transit priority area as defined in Public Resources Code Section 21099(a)(7). Although the project site is

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[5] In March 2018 CARB adopted updated targets for ABAG/MTC that became applicable in October 2018. These new targets are a per capita reduction in GHG emissions of 10 percent by year 2020 and 19 percent by 2025. SB 375 Regional Greenhouse Gas Emissions Reduction Targets, CARB Resolution 18-12, adopted March 22, 2018. Resolution is available at https://www.arb.ca.gov/cc/sb375/finalres18-12.pdf. Updated targets are available at https://www.arb.ca.gov/cc/sb375/finaltargets2018.pdf.

[6] California Air Resources Board staff, *Technical Evaluation of the Greenhouse Gas Reduction Quantification for the Association of Bay Area Government's and Metropolitan Transportation Commission's SB375 2017 Sustainable Communities Strategy, June 2018. Available at* http://www.arb.ca.gov/cc/sb375/sb375.htm Accessed on August 3, 2018.

not in a Priority Development Area designated in Plan Bay Area 2040, it fulfills many of the strategies contained in the plan as the site is located in a mixed-use neighborhood with retail, restaurant, childcare and other community services that will encourage residents to walk or bicycle to nearby services. The Project or Project Variant will include retail space and a childcare center on the site that will further reduce automobile travel.

6. If the project is a multi-family residential project, evidence that (1) private vehicle parking spaces are priced and rented or purchased separately from dwelling units; or (2) the dwelling units are subject to affordability restrictions that prescribe rent or sale prices, and the cost of parking spaces cannot be unbundled from the cost of dwelling units.

The Project or Project Variant proposes to provide unbundled parking for all residential units except for any dwelling units subject to affordability restrictions that prescribe rent or sale prices and for which the cost of parking spaces cannot be unbundled from the cost of the affordable dwelling units. All market rate multifamily units/buildings will have unbundled parking.

7. Information establishing that the project entails a minimum investment of $100 million in California through the time of completion of construction.

The Project includes 1,100 residential units. The Project will have expended over $450 million in construction costs by the time the project is completed, according to the estimate presented in the Applicant's Environmental Evaluation Application to the San Francisco Planning Department in June of 2018. Thus, the Project or Project Variant will exceed the minimum investment of $100 million by the time of completion of construction.

8. Information establishing that the prevailing and living wage requirements of Public Resources Code section 21183(b) will be satisfied.

Public Resources Code section 21183(b) requires that a project to be certified by the Governor must create "high-wage, highly skilled jobs that pay prevailing wages for construction jobs and living wages and provide construction jobs and permanent jobs for Californians, and help reduce unemployment.".

Public Resources Code section 21183(b) defines "jobs that pay prevailing wages" as "all construction workers employed in the execution of the project will receive at least the general prevailing rate of per diem wages for the type of work and geographic area, as determined by the Director of Industrial Relations pursuant to Sections 1773 and 1773.9 of the Labor Code." The Applicant will include the prevailing wage requirement in all construction contracts.

The Project or Project Variant will create high-wage, highly skilled jobs, both during construction and during operation. In addition to the prevailing wage requirements for construction workers, the Applicant will be required to comply with local ordinances that require payment of living wages. Chapter 23.61 of the San Francisco Administrative Code required the payment of prevailing wages for construction work performed on any real property sold to the contracting party under a City-as-seller contract for a housing development. Chapter 12R of the San Francisco Administrative Code requires payment of a minimum wage that is higher than that required by the State of California. As of July 1, 2018, the minimum wage in San Francisco is $15.00 per hour, substantially higher than the California minimum wage of $11.00 per hour in 2018. The San Francisco ordinance provides for annual increases in July of each year after 2018 based on the Consumer Price Index for urban wage earners for the San Francisco-Oakland-San Jose, California metropolitan statistical area. The requirements of Chapter 12R are not applicable to employees who are covered by a collective bargaining agreement if the agreement expressly waives the ordinance's requirements. A copy of Chapters 23.61 and 12R is presented in **Attachment D** to this Application, along with a copy of the California Department of Industrial Relations' letter approving the San Francisco Office of Labor Standards Enforcement's Labor Compliance Program.

9. Information establishing that the project will not result in any net additional greenhouse gas emissions. This information is subject to a determination signed by the Executive Officer of the Air Resources Board that the project does not result in any net additional greenhouse gas emissions, following the procedures set forth in section 6 of the Governor's Guidelines.

CARB must review the analysis of greenhouse gas emissions (GHG) from construction and operation of the Project or Project Variant. The analysis should include the technical basis for characterizing and analyzing GHG emissions and for identifying and quantifying the GHG reduction potential of proposed strategies to fully offset any GHG emissions generated by a proposed project. A Report prepared by Ramboll presents the technical methodology for and results of quantifying the GHG emissions from the existing activities on the Project site and the GHG emissions from construction and operation of the Project or Project Variant. The Report and its Appendix materials are in **Attachment E**.

Project-generated emissions were calculated yearly during construction phases, with operation of earlier phases overlapping with later construction phases. Construction was assumed to occur over a 6-year period with two distinct phases. Operational emissions were estimated for 2024 through 2057 to account for an approximately 30-year lifespan of the project following buildout of each phase.

Total GHG emissions from construction activities would be 13,673 MT CO_2e for the Proposed Project and 17,574 MT CO_2e for the Project Variant. Total operational emissions were estimated as 3,301 MT CO_2e/year for the Project and 4,186 MT for the Project Variant at the first full year of buildout (2027). Total gross operational emissions would be 74,823 MT for the Project and 90,882 MT for the Project Variant.

To offset GHG emissions from construction in 2020 through 2024 and from operation in 2024 through 2054 for Phase 1 or through 2057 for Phase 2, the project sponsor commits to measures to ensure there would be no net additional GHG emissions from the Project or the Project Variant. This would be achieved through on-site mitigation measures such as installing additional solar panels or electric vehicle charging stations, or through the purchase of qualified GHG credits.

10. Information establishing that the project will comply with the requirements for commercial and organic waste recycling in Chapters 12.8 (commencing with Public Resources Code section 42649) and 12.9 (commencing with Public Resources Code Section 42649.8), as applicable.

California has had statutory and regulatory requirements related to solid waste recycling for well over 10 years requiring local governments to reduce solid waste in landfills with waste diversion programs. The two more recent statutes, in Chapters 12.8 and 12.9 of Division 30 of the Public Resources Code related to waste management, require recycling of solid waste and organic waste. Chapter 12.8 requires that businesses and multi-family residential buildings with five units or more that generate more than four cubic yards of solid waste per week source separate its solid waste and subscribe to some kind of recycling service consistent with local ordinances or state regulations. Chapter 12.9 requires that businesses generating over specified amounts of organic solid waste per week arrange for recycling services for that organic solid waste, and also requires that if the state has not reached a reduction of 50 percent below the 2014 level of disposal of organic waste by 2020, businesses that generate more than two cubic yards of solid waste per week must source separate and arrange for recycling of organic solid waste. These statutes also require local jurisdictions to establish a commercial solid waste recycling program if it did not already have one as of July 2012, and an organic solid waste recycling program by January 2016 if it did not already have one.

The Project or Project Variant will be subject to these statutory requirements and will comply by following all of the requirements of San Francisco's local recycling and composting ordinances.

San Francisco's Mandatory Recycling and Composting Ordinance (No. 100-09) in Chapter 19 of the San Francisco Environment Code is a local municipal ordinance requiring all persons located in San Francisco to separate their recyclables, compostable and landfilled trash and to participate in recycling and composting programs. The Applicant has included appropriate recycling and composting collection facilities in the design of each building and in the overall site design so that these materials can be easily disposed of by residents and employees and easily collected by the various solid waste collection and disposal companies that serve the project site.

Construction of the Project would generate an estimated 56,000 net cubic yards of soil from excavation of the site. The San Francisco Construction and Demolition Debris Recovery Ordinance (No. 27-06), Chapter 14 in the San Francisco Environment Code, requires that substantial amounts of construction and demolition debris material removed from a project must be recycled or reused. All demolition and construction debris must be transported by a registered transporter and processed by a registered facility. The processing facility must divert a minimum of 65 percent of total waste received from landfills, including materials separated for reuse and recycling. No construction and demolition debris can be taken to landfill or put in the garbage, according to San Francisco Health Code Section 288. Copies of these local ordinances are provided in **Attachment F**.

Thus, the Applicant will be required to comply not only with the Public Resources Code requirements for commercial and organic waste recycling, but also with the requirements of San Francisco's local ordinances requiring recycling and composting solid waste both during construction and during operation of the Project or Project Variant.

11. Information documenting a binding agreement between the project proponent and the lead agency establishing the requirements set forth in Public Resources Code section 21183(e) all mitigation measures will be conditions of approval and enforceable, and environmental mitigation measures will be monitored and enforced for the life of the obligation, (f) applicant will pay costs for hearing by Court of Appeal, and (g) (applicant will pay costs of preparing the record of proceedings).

Written acknowledgement from the project sponsor containing commitments regarding Public Resources Code sections 21183(e)(f) and (g) is included as **Attachment G.** The Applicant is committed to comply with all Mitigation Monitoring and Reporting Program measures from the EIR that are included as conditions of approval and that those conditions will be fully enforceable by the San Francisco Planning Department, Department of Building Inspection, Health Department, and/or the Department of the Environment. The Applicant agrees to pay the costs for hearing by the Court of Appeal, and will pay the costs of preparing the record of proceedings.

REFERENCES

Association of Bay Area Governments/Metropolitan Transportation Commission, *Performance Assessment Report, Plan Bay Area 2040*, July 26, 2017.

California Air Resources Board, Executive Order G-14-028, April 10, 2014.

California Air Resources Board, Resolution 18-12, March 18, 2018.

California Air Resources Board, *SB 375 Regional Greenhouse Gas Emissions Reduction Targets*.

California Air Resources Board, *Technical Evaluation of the Greenhouse Gas Reduction Quantification for the Association of Bay Area Government's and Metropolitan Transportation Commission's SB 375 2017 Sustainable Communities Strategy, June 2018.*

California Building Standards Commission. *California Green Building Standards Code (CCR, Title 24, Part 11 – CALGreen)*, January 1, 2017.

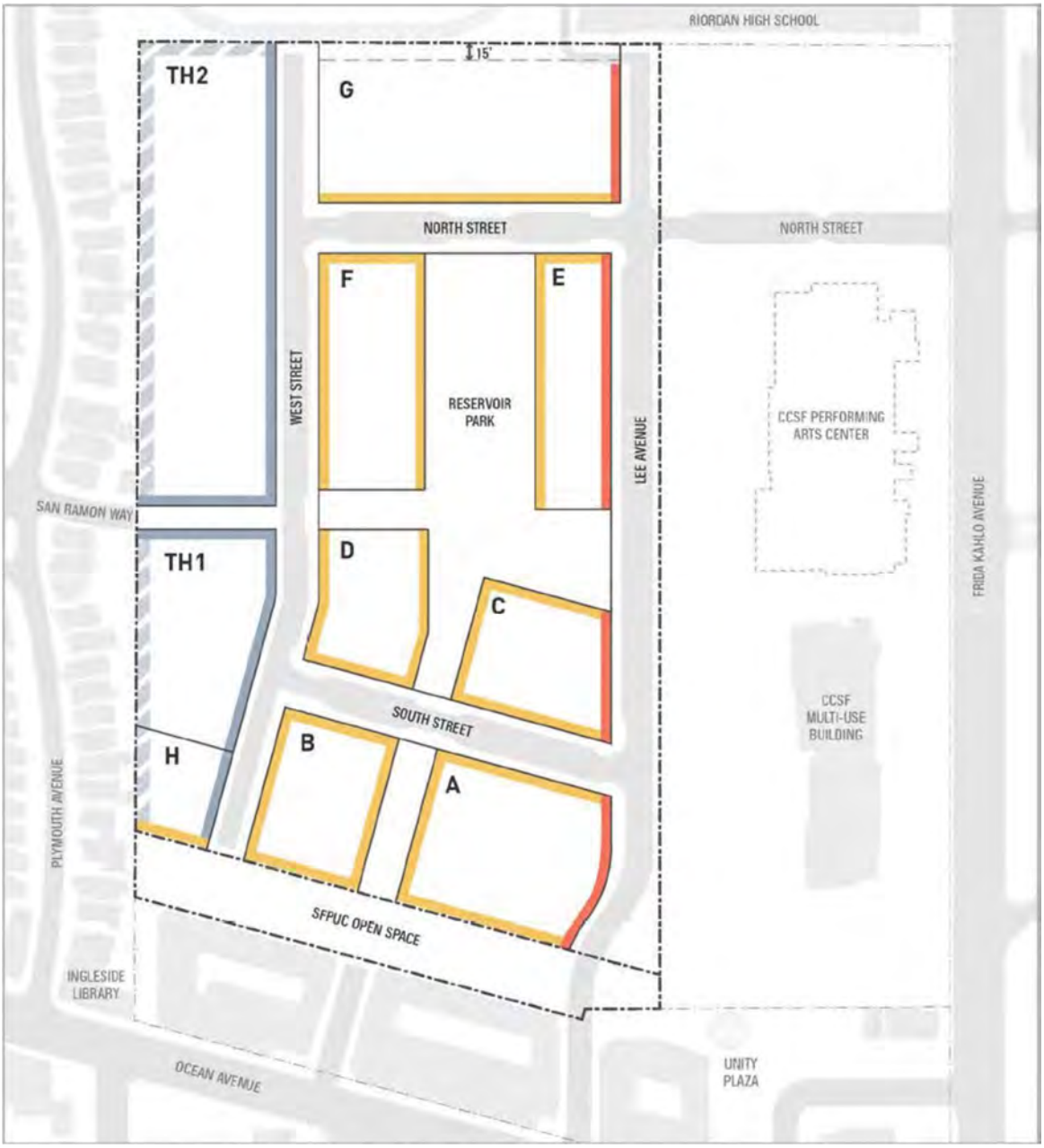
Environmental Evaluation Application, AvalonBay Communities & BRIDGE Housing, submitted to San Francisco Planning Department by The City and County of San Francisco-Rosanna Russell (PUC) on June 1, 2018.

SF Planning Department's *Transportation Impact Analysis Guidelines for Environmental Review – Update (SF Guidelines),* February 2019

Office of Planning and Research, *Governor's Guide for Streamlining Judicial Review under the California Environmental Quality Act Pursuant to AB900*, January 2018.

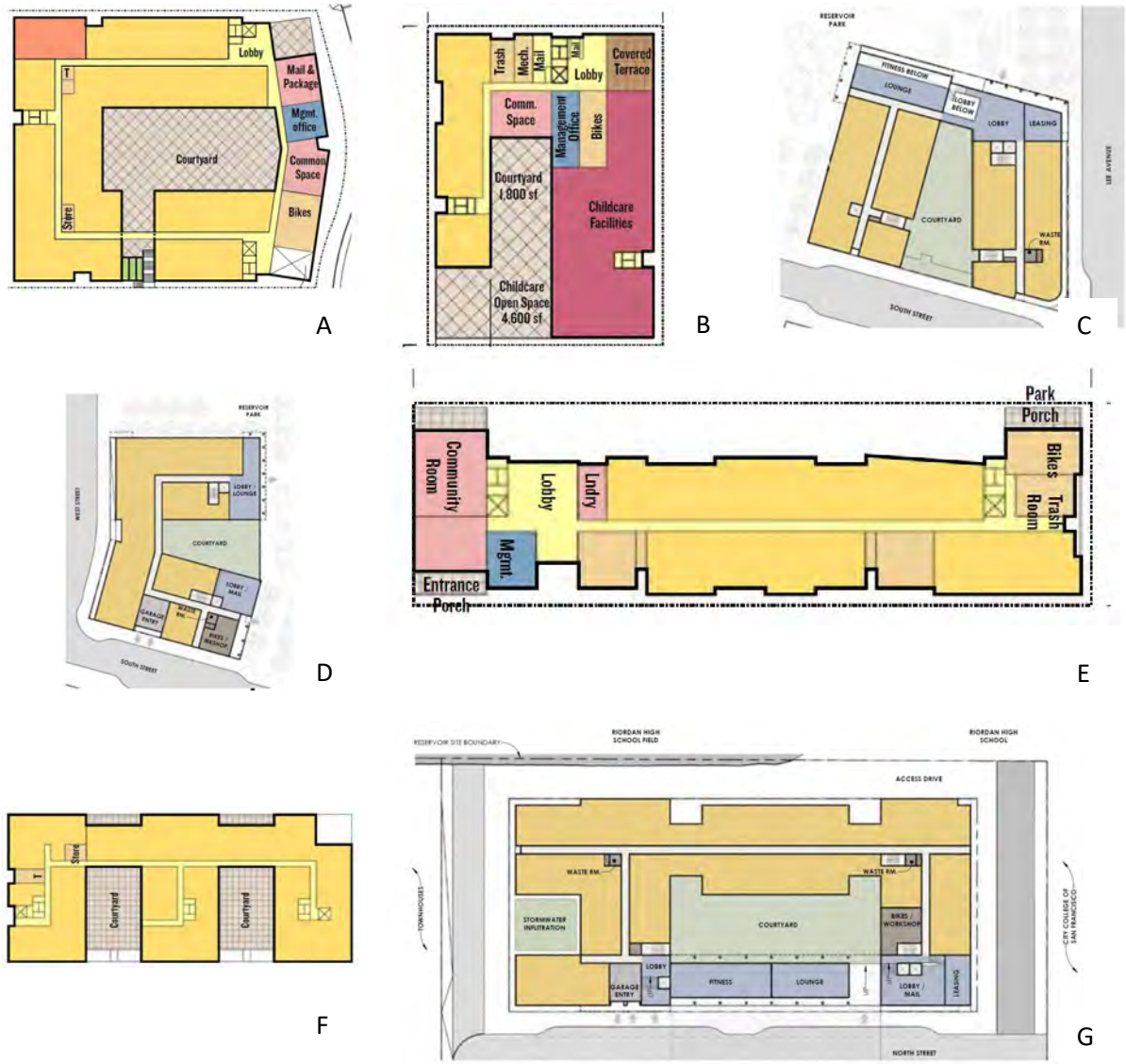
ATTACHMENT A
Project Drawings

1. Site Plan – Existing (Aerial View)



2. Site Plan - Proposed

3. Site Plan – Proposed (Neighborhood View)



4. Block Floor Plans

ATTACHMENT B
Project Photo Simulations

1. Reservoir Park Looking West

2. Reservoir Park looking towards City College

3. Balboa Plaza Looking Towards Mount Davidson

4. Townhome at Westwood Gateway and Reservoir Park

ATTACHMENT C
AB900 Transportation Assessment

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MEMORANDUM

Date: May 14, 2019

Project #: 22126.003

To: Joe Kirchofer & Nora Collins – Avalon Bay
Kearstin Dischinger – BRIDGE Housing

From: Amanda Leahy, AICP and Tim Erney, AICP/PTP – Kittelson & Associates, Inc.
Project: Balboa Reservoir
Subject: AB 900 Transportation Assessment – Final

This memorandum provides a transportation assessment of the proposed Balboa Reservoir project to determine whether it meets the transportation efficiency requirements for classification as an Environmental Leadership Development Project under California Assembly Bill 900 (AB 900). In particular, this memorandum includes a background summary of the project location and surrounding area, summarizes the travel demand for the Developer's Proposed Option and Additional Housing Option using the San Francisco Planning Department's *Transportation Impact Analysis Guidelines for Environmental Review – Update* (*SF Guidelines*), published February 2019, and estimates changes in trip generation as a result of trip credits for existing uses and implementation of transportation demand management measures.

The trip generation for both the Developer's Proposed Option and Additional Housing Option are analyzed against the trip generation of a comparable project, which is assumed to be located within the same neighborhood but would not include trip credits for existing uses or transportation demand management measures. The resulting trip generation comparisons summarize the extent of the transportation efficiency changes expected from the Developer's Proposed Option and Additional Housing Option.

Project Location

The project site is a 17.6-acre rectangular parcel and encompasses Assessor's Block 3180/Lot 190 in San Francisco's West of Twin Peaks neighborhood. The site is north of the Ocean Avenue commercial district, west of the City College of San Francisco Ocean Campus (City College), east of the Westwood Park neighborhood, and south of Archbishop Riordan High School. The project site is located close to major transit services and facilities, bicycle and pedestrian networks and facilities, and a diversity and density of land uses, including commercial, institutional, retail, office, and residential uses.

Project Description

The proposed project would develop the existing surface parking lot on the site with mixed-income housing, open space, a childcare facility, a community room available for public use, retail space, on- and off-street parking, and new streets, utilities, and other infrastructure. The site currently contains a surface parking lot with 1,007 vehicular parking spaces, but does not include any permanent structures. The parking lot provides overflow vehicular parking for City College students, faculty, and staff.

This transportation assessment analyzes two different sets of options for the site's residential density to capture a range of possible development on the project site: the Developer's Proposed Option (1,100 dwelling units) and the Additional Housing Option (1,550 dwelling units). Development under each of the two options would entail the same land uses and street configurations, and similar site plans. The proposed project (both options) would include transportation and circulation changes, including the extension of existing north–south Lee Avenue across the site, and a new internal street network. The project would include a roadway network that would be accessible for people walking, including people with disabilities, bicycling, and driving.

Developer's Proposed Option. The Developer's Proposed Option would construct 1,100 residential dwelling units in 1,283,000 gross square feet, approximately 50 percent of which would be designated affordable. The housing will be composed of 40 percent studios and one-bedroom units, 30 percent two-bedroom units and 30 percent three-bedroom units. The Developer's Proposed Option would also include approximately 10,000 square feet of community space (childcare and a community room for public use) and approximately 7,500 square feet of retail. The Developer's Proposed Option would include 750 new public, non-accessory vehicular parking spaces in a 198,900 gross square foot parking garage. In addition to the public parking, accessory parking may be provided at a ratio of up to 0.5 spaces per unit throughout the site (up to 550 total spaces). Residential accessory parking would be provided in an additional 141,000 gross square feet of parking podiums beneath buildings onsite. Blocks A through I of the proposed development would allow one below-grade level for vehicle parking spaces. Buildings on the site would range from 2 stories (25 feet) to 7 stories (75 feet), and Blocks A through I would include ground floor building lobbies and common space.

Additional Housing Option. The Additional Housing Option would construct 1,550 residential dwelling units with the same unit mix as the Developer's Proposed Option, approximately 10,000 square feet of community space (childcare and a community room for public use), approximately 7,500 square feet of retail. Accessory parking may be provided at a ratio of up to 0.42 spaces per unit throughout the site (up to 650 total residential vehicular parking spaces). No public parking spaces would be provided.

Site Access and Circulation

Vehicle Access

Local access to the project site is provided by an urban street grid network. Direct vehicular access to the project site is provided from Lee Avenue off of Ocean Avenue, and North Access Road off of Frida Kahlo

Way. Regional access is provided by Interstate 280 (I-280). I-280 provides the primary regional access to the project site by on- and off-ramps at Ocean and Geneva avenues.

Pedestrian Access

Observations of pedestrian facilities including sidewalks, crosswalks, and curb ramps and pedestrian activity within the study area were conducted in August and September 2018 when City College was in session. Observations indicated facilities for people walking were generally complete in the study area, with sidewalks provided continuously on both sides of the streets and crosswalks provided at most intersections. However, access for people walking to and from the project site is limited, particularly in the north, south, and west sides, which lack a direct connection to the project site.

Sidewalks on the east and west side of Lee Avenue between the project site and Ocean Avenue are 11 feet wide and 8 feet wide, respectively, including a 3- to 4-foot-wide planting strip. Sidewalks on the north side of Ocean Avenue between Lee Avenue and Harold Way are approximately 10 feet wide including a 3- to 4-foot-wide planting strip. There are high visibility marked crossings and pedestrian countdown signals provided at all signalized intersections adjacent to the project block.

Bicycle Access

Existing on-street bicycle facilities, as designated by the San Francisco Municipal Transportation Agency (SFMTA) Bike Network Map are described in this section.[1]

- **Ocean Avenue**—A class III facility runs east–west between 19th Avenue and Frida Kahlo Way. A class II facility runs east–west between Frida Kahlo Way and Alemany Boulevard.
- **Geneva Avenue**—A class III facility runs east–west from Frida Kahlo Way to Paris Street where it becomes a class II facility and continues as a class II and class III facility to the Cow Palace.
- **Monterey Boulevard**—A class III facility runs east–west from Santa Clara Avenue to Gennessee Street.
- **Plymouth Avenue**—A class III facility runs north–south and extends one block from Holloway Avenue to Ocean Avenue.
- **Lee Avenue**—A class II facility runs in the uphill (southbound) direction and extends one block from Ocean Avenue to Holloway Avenue. A class III facility runs in the downhill (northbound) direction and extends one block from Holloway Avenue to Ocean Avenue.
- **Frida Kahlo Way**—A class II facility runs north–south from Ocean Avenue to Judson Avenue and continues on Judson Avenue to Gennessee Street.

[1] SFMTA, San Francisco Bike Network Map, July 2016, https://www.sfmta.com/sites/default/files/maps/2016/SFMTA%20Retail%20Map%20-%207.7.16-Online.pdf, accessed March 20, 2019.

Transit Access

The project site is served by local transit provided by the San Francisco Municipal Railway (Muni), operated by SFMTA. Regional transit provides service to the East Bay via the Bay Area Rapid Transit rail service (BART).

Local Transit

Muni provides transit service within the City and County of San Francisco, including bus (diesel, bio-diesel/electric hybrid and electric trolley), light rail (Muni Metro), cable car, and electric streetcar lines.

Muni provides local transit for destinations within San Francisco, with nearby service along Ocean Avenue, Geneva Avenue, and Frida Kahlo Way. Muni operates eight bus lines and one light-rail line with stops located within about 0.5 mile of the project site.

Major bus routes operating within 0.5 mile of the project site include 8 Bayshore and 8BX California 'B' Express connecting to the Excelsior District, Visitacion Valley, Portola, Downtown, Chinatown, North Beach, and Fisherman's Wharf and the 49 Van Ness/Mission connecting to the Mission District and Van Ness Avenue corridor. Additional crosstown routes serving the site include the 23 Monterey, 28R 19th Avenue Rapid, 29 Sunset, 43 Masonic, and 54 Felton. The K Ingleside line rail line provides service along Ocean Avenue (center-running on the street), connecting to Balboa Park BART/Muni Station at its eastern terminus and traveling west through the Twin Peaks Tunnel and Market Street Subway to downtown San Francisco.

A local transit hub is provided at the City College Terminal located at the northwest corner of Ocean Avenue/Frida Kahlo Way/Geneva Avenue. The loop provides ingress from Ocean Avenue and egress onto Frida Kahlo Way north of the San Francisco Fire Department (SFFD) Station 15. The City College Terminal provides three boarding bays (two island bays and one curb bay) shared between the 8, 8BX, and 49 routes. Egress onto Frida Kahlo Way is facilitated by actuated transit-only signals.

Regional Transit

Regional transit service to and from the East Bay is provided via BART commuter rail service. BART is located within walking distance of the project site and many Muni routes connect to the Balboa Park BART/Muni Station. Other regional transit services can be reached by bicycle or from various Muni or BART lines (some requiring a transfer). Regional transit providers and service are described below.

BART provides regional commuter rail service between San Francisco and the East Bay (Antioch, Richmond, Dublin/Pleasanton and Warm Springs/South Fremont), as well as between San Francisco and San Mateo County (Daly City, SFO Airport, and Millbrae). Weekday hours of operation are between 4 AM and midnight. During the weekday p.m. peak period, headways are 5 to 15 minutes along each line. Within San Francisco, BART operates underground along Market Street to Civic Center Station where it turns south through the Mission District towards Daly City, running partially aboveground between Glen Park and Daly City stations. The BART stations nearest to the project study area is the Balboa Park

BART/Muni Station at San Jose Avenue between Ocean Avenue and Geneva Avenue, about 0.5 mile away from the project site.

Other Transit Service Providers

Commuter Shuttles. The SFMTA Board unanimously approved a Commuter Shuttle Program on February 12, 2017. The Commuter Shuttle Program provides permits to eligible commuter shuttle operators (e.g., those provided by employers, educational institutions, medical facilities, and various companies/office buildings) to use a network of designated streets and stops.

No designated shared Muni/commuter shuttle stops are located in the study area.[2] Ocean Avenue, Geneva Avenue, Frida Kahlo Way, Judson Avenue, Forester Street, and Monterey Boulevard east of Ridgewood Avenue are designated unrestricted arterials in the shuttle network. Plymouth Avenue, Faxon Avenue, Southwood, Northwood, Eastwood, and Westwood drives, Wildwood Way, and Monterey Boulevard west of Ridgewood Avenue are designated restricted streets in the commuter shuttle network.

Comparable Projects

To analyze the transportation efficiency of the Developer's Proposed Option and Additional Housing Option, the projects' vehicle trip generation was examined against that of a comparable development, which represents a baseline case. For the purpose of this assessment, the comparable project has the same land uses and quantities (size/number of units) as the Developer's Proposed Option and Additional Housing Option, but does not have the design-specific characteristics as the Developer's Proposed Option and Additional Housing Option that would lead to trip reductions. Specifically, trip reductions due to the removal of existing uses are associated with the infill nature of the site and would therefore be applicable to the Developer's Proposed Option and Additional Housing Option only and would not be applicable to the comparable project. Similarly, trip reductions due to the transportation demand management (TDM) program are considered to be design-specific benefits and therefore would be applicable to the Developer's Proposed Option and Additional Housing Option and not to the comparable project.

Trip Generation

Many factors affect travel behavior. These factors include density, diversity of land uses, design of the transportation network, access to regional destinations, distance to high-quality transit, development scale, demographics, and transportation demand management.[3] Typically, low-density development at great distance from other land uses, located in areas with poor access to nonprivate vehicular modes of

[2] Permit-holding shuttle operators are required to provide real-time GPS data regarding shuttle vehicle movements. This data enables the SFMTA to track when a given vehicle travels onto an unauthorized (or restricted) street, either a non-arterial street or a weight or passenger capacity restricted street.

[3] California Smart-Growth Trip Generation Rates Study, Appendix A, University of California, Davis Institute of Transportation Studies, March 2013.

travel, generates more automobile travel compared to development located in urban areas, where a higher density, mix of land uses, and travel options other than private vehicles are available.

This section summarizes daily person and vehicle trip generation estimates for the comparable projects and proceeds to summarize vehicle trip reductions associated with the proposed project and project variant. Specifically, this includes vehicle trip reductions related to the proposed transportation demand management program and removal of existing uses.

Baseline person and vehicle trip generation for each scenario was calculated using weekday daily rates for the proposed land uses provided in the SF Planning Department's *Transportation Impact Analysis Guidelines for Environmental Review – Update* (*SF Guidelines*), published in February 2019. Detailed travel demand calculations for the comparable projects are included as Appendix A.

Comparable Projects

Comparable to the Developer's Proposed Option: The project comparable to the Developer's Proposed Option consists of the same type and size of uses as the Developer's Proposed Option: 1,100 residential dwelling units, 7,500 square feet of retail space, and 10,000 square feet of child care use. Considering the size and type of land uses, when applying the *SF Guidelines* rates without accounting for design factors (TDM program or elimination of existing trips), the comparable project would generate 10,634 daily person trips and 3,314 total daily vehicle trips.

Comparable to the Additional Housing Option: The project comparable to the Additional Housing Option consists of the type and size of uses as the proposed project: 1,550 residential dwelling units, 7,500 square feet of retail space, and 10,000 square feet of child care use. Considering the size and type of land uses, when applying the *SF Guidelines* rates without accounting for design factors (TDM program or elimination of existing trips), the comparable project would generate 14,474 daily person trips, 5,640 total daily vehicle trips.

Project Related Reductions to Vehicle Trips

The infill nature, design, and TDM program would reduce vehicle trips of the Developer's Proposed Option and Additional Housing Option compared to the comparable projects. Vehicle trip reductions associated with the proposed TDM program and removal of existing uses are estimated and the quantitative analysis of these reductions to vehicle trips are presented in this section.

Transportation Demand Management (TDM) Program

The Developer's Proposed Option and Additional Housing Option would implement a number of transportation demand management measures to encourage the use of non-auto modes and reduce vehicle trips. Proposed TDM measures are identified in Table 1, along with the estimated vehicle trip reduction rate associated with implementation.

Table 1: TDM Measures and Estimated Vehicle Trip Reduction

TDM Measure	Range of Vehicle Trip Reduction Rate	Estimated Vehicle Trip Reduction Rate for Developer's Proposed Option and Additional Housing Option[1]
Improve Biking/Walking Network	0% to 2%	1.0%
Provide Bicycle Parking	0.625%	0.6%
Implement Car Share Program	5% to 15%	5.0%
Unbundle Parking	2.6% to 13%	4.3%
Limit On-Site Parking Supply	5% to 12.5%	8.8%
Improved Design of Development[2]	3% to 21.3%	10.7%
TDM Program Total		**30.4%**

Source: California Air Pollution Control Officers Association, *Quantifying Greenhouse Gas Mitigation Measures*, August 2010.
[1] Vehicle trip reduction rate estimated based on the estimated level of adoption and aggressiveness of implementation of a given strategy and account for the implementation of other TDM program elements so as not to overestimate vehicle trip reduction for the overall program.
[2] Design elements include: multimodal wayfinding, real-time information displays, subsidized bike share memberships, bicycle repair station, showers and lockers, delivery supportive amenities, and tailored transportation marketing.

The range of effectiveness for vehicle trip reductions (VTR) identified for each measure is based on information included in the California Air Pollution Control Officers Association, Quantifying Greenhouse Gas Mitigation Measures, August 2010 (CAPCOA Report). The quantification methods provided in the CAPCOA Report are based on an extensive literature review and are appropriate for use in this project-level analysis. The estimated vehicle trip reduction rate is based on the anticipated level of adoption and aggressiveness of implementation of a given strategy. Vehicle trip reduction is estimated by applying the vehicle trip reduction rate to the vehicle trips generated by the target user group. The analysis assumes that the TDM measures would affect residents, employees, and visitors to the site and that vehicle trip length and average vehicle occupancy would remain constant for each group.

As shown in Table 1, implementation of the TDM Program would result in an estimated reduction of about 30% of the vehicle trips generated by the proposed project or project variant. Implementation of the proposed TDM program would result in a reduction of 1,044 daily vehicle trips for the Developer's Proposed Option and 1,345 daily vehicle trips for the Additional Housing Option.

Removal of Existing Uses from the Project Site

As previously noted, the project site is currently occupied by a surface parking lot with 1,007 vehicle parking spaces. Two driveways on Frida Kahlo Way provide access to the surface parking lot on the project site and an adjacent surface parking lot that provides vehicle parking for City College students and faculty. Driveway counts and parking occupancy counts were collected to determine the existing vehicular activity at the site. Driveway counts were collected during the weekday AM and PM peak periods on Thursday, December 7, 2017 and parking inventory and occupancy data was collected on Thursday, December 7, 2017, Wednesday, January 31, 2018, and Wednesday, April 18, 2018. Both driveway counts and parking inventory and occupancy data were collected when City College was in

session. Parking data was collected on an hourly basis between 7:00 AM and 9:00 PM, Detailed driveway counts and parking inventory and occupancy data is included as Appendix B.

Based on vehicle turning movement counts collected, there were 499 vehicle-trips (335 inbound, 164 outbound) and 487 vehicle-trips (204 inbound, 283 outbound) at the site driveways during the weekday AM and PM peak hours, respectively. According to parking utilization data collected at the project site, a total of 53 vehicles were parked during the weekday AM peak hour and 52 vehicles were parked during the weekday PM peak hour. Therefore, it can be expected that about 11 percent of the vehicles at the project driveways were traveling to/from the project site.

The daily vehicle trips accessing the existing site were estimated using the ratio of daily to peak hour trip generation rates. Based on this analysis, the existing site was estimated to generate a total of 644 daily vehicle trips. Because the Developer's Proposed Option would replace 750 of the 1,007 public parking spaces (74%), the existing activity was reduced by 74% to account for the existing trips that would continue to access parking on the site. This level of activity (167 vehicle trips) represents a 4.9% reduction in daily vehicle trips when compared with the Developer's Proposed Option comparable project. This existing activity represents an 14.4% reduction in daily vehicle trips when compared with the Additional Housing Option comparable project.

Trip Generation Comparison Summary

To compare the overall trip generation of the Developer's Proposed Option and Additional Housing Option to the comparable project, the *SF Guidelines* trip generation estimates for the Developer's Proposed Option and Additional Housing Option were adjusted to account for existing uses and the TDM program. Both the Developer's Proposed Option and the Additional Housing Option would lead to a reduction in vehicle trips when analyzed against the respective comparable project. A summary of the land use and design-related elements and their associated vehicle trip reductions is provided in Table 2. The detailed trip generation and reduction calculations are shown in Appendix C.

The analysis presented above demonstrates that both the Developer's Proposed Option and Additional Housing Option would exceed the minimum threshold of 15% transportation efficiency required for the project to be considered an Environmental Leadership Development Project. This transportation efficiency is achieved through the removal of existing land uses as well as the implementation of transportation demand management measures and encouragement of the use of sustainable modes. The combination of location and design-related benefits represent a reduction of approximately 35% daily vehicle trips for the Developer's Proposed Option and approximately 45% daily vehicles trips for the Additional Housing Option when compared against the comparable projects. Implementation of the TDM program alone would exceed the minimum of 15% transportation efficiency required for the Developer's Proposed Option and Additional Housing Option to be considered an Environmental Leadership Development Project.

Table 2: Summary of Project-Related Daily Vehicle Trip Reductions

	Vehicle Trip Reduction	
Transportation Efficiency Strategy	Number	Percent
Developer's Proposed Option		
Comparable Project – Baseline Trip Generation	*3,441*	*100%*
Transportation Demand Management Program	1,044	30.3%
Elimination of Existing Trips	167	4.9%
Total Project-Related Reduction	***1,211***	***35.2%***
Additional Housing Option		
Comparable Project – Baseline Trip Generation	*4,460*	*100%*
Transportation Demand Management Program	1,354	30.4%
Elimination of Existing Trips	644	14.4%
Total Project-Related Reduction	***1,998***	***44.8%***

Source: SF Guidelines, 2002. California Air Pollution Control Officers Association, *Quantifying Greenhouse Gas Mitigation Measures*, August 2010.

Balboa Reservoir Project

AB 900 Transportation Assessment

Technical Appendix

Appendix Contents

Appendix A1: Travel Demand Calculations for Comparable Project to Developer's Proposed Option

Appendix A2: Travel Demand Calculations for Comparable Project to Additional Housing Option

Appendix B1: Weekday AM and PM Peak Hour Driveway Counts

Appendix B2: Hourly Parking Utilization Counts

Appendix C: Trip Generation Calculations and Comparison for Developer's Proposed Option and Additional Housing Option

Appendix A1: Travel Demand Calculations for Comparable Project to Developer's Proposed Option

OD PERSON TRIPS BY TRIP PURPOSE AND DIRECTION - DISTRICT

Outbound

		1 Downtown/ NorthBeach	2 SoMa	3 Marina/Western Market	4 Mission/Potrero	5 Outer Mission/Hills	6 Bayshore	7 Richmond	8 Sunset	9 Islands	10 South Bay	11 East Bay	12 North Bay	Total
Auto Person Trips	**Daily Work Trips**	7.6	2.9	4.8	3.0	3.7	3.6	2.1	5.1	-	578.0	39.0	2.2	652
	Daily Non-Work Trips	4.1	4.5	6.0	2.8	12.6	1.4	1.5	14.4	-	2,144.4	24.5	0.7	2,217
Taxi / TNC Person Trips	**Daily Work Trips**	0.6	0.3	0.4	0.2	0.2	0.3	0.2	0.4	-	40.3	2.8	0.2	46
	Daily Non-Work Trips	0.3	0.3	0.4	0.2	0.7	0.1	0.1	0.9	-	139.0	1.3	0.0	143
Transit Person Trips	**Daily Work Trips**	113.0	12.4	3.2	6.3	1.4	-	8.1	6.5	-	475.4	37.5	4.4	668
	Daily Non-Work Trips	15.9	3.2	1.6	19.9	6.3	-	0.9	11.1	-	479.8	17.1	3.5	559
Auto VehicleTrips*	**Daily Work Trips**	7.4	2.9	4.8	2.8	3.5	3.5	1.9	5.0	-	535.0	37.0	2.0	606
	Daily Non-Work Trips	2.0	2.4	4.8	1.9	6.9	0.6	1.0	8.2	-	1,313.0	16.6	0.6	1,358
Taxi / TNC Vehicle Trips*	**Daily Work Trips**	0.4	0.2	0.2	0.1	0.1	0.2	0.1	0.2	-	24.1	1.7	0.1	27
	Daily Non-Work Trips	0.2	0.2	0.2	0.1	0.4	0.1	0.0	0.5	-	83.2	0.8	0.0	86

*Auto vehicle trips based on rolling up of shared ride 2, shared ride 3, and drive alone person trips divided by an AVO of 2,3.5, and 1, respectively; Taxi/TNC Vehicle trips based on a AVO of 1.67 b

OD PERSON TRIPS BY TRIP PURPOSE AND DIRECTION - I

Inbound

		1 Downtown/ NorthBeach	2 SoMa	3 Marina/Wes ternMarket	4 Mission/Potr ero	5 OuterMissio n/Hills	6 Bayshore	7 Richmond	8 Sunset	9 Islands	10 South Bay	11 East Bay	12 North Bay	Total
Auto Person Trips	**Daily Work Trips**	6.8	1.8	5.7	2.8	3.9	3.8	2.0	4.3	-	543.0	28.6	2.0	605
	Daily Non-Work Trips	3.9	6.3	8.5	3.1	11.3	2.0	2.2	20.0	-	2,184.7	25.3	1.6	2,269
Taxi / TNC Person Trips	**Daily Work Trips**	0.5	0.1	0.5	0.2	0.3	0.3	0.2	0.3	-	36.3	1.8	0.2	40
	Daily Non-Work Trips	0.2	0.5	0.6	0.2	0.7	0.1	0.1	1.5	-	143.7	1.4	0.1	149
Transit Person Trips	**Daily Work Trips**	117.1	27.2	3.1	4.2	0.3	-	8.1	-	-	380.0	36.6	-	577
	Daily Non-Work Trips	19.9	2.6	6.2	7.9	2.1	-	0.9	11.1	-	477.9	12.5	3.5	545
Auto VehicleTrips*	**Daily Work Trips**	6.6	1.8	5.6	2.5	3.3	3.8	2.0	4.2	-	500.1	26.7	1.9	558
	Daily Non-Work Trips	2.4	3.6	7.1	1.8	5.6	1.6	1.7	11.4	-	1,364.5	17.5	1.2	1,419
Taxi / TNC Vehicle Trips*	**Daily Work Trips**	0.3	0.1	0.3	0.1	0.2	0.2	0.1	0.2	-	21.7	1.1	0.1	24
	Daily Non-Work Trips	0.1	0.3	0.4	0.1	0.4	0.1	0.1	0.9	-	86.0	0.8	0.1	89

*Auto vehicle trips based on rolling up of shared ride 2)ased on Bruce Schaller's TNC Study of NYC

STEP 1: INPUTS

Land Use	Res
Amount	2185
TAZ	915
Distribute By	District
Taxi/TNC Occupancy	1.67
Place Type	3
District Number	10
District Name	Outer Mission

STEP 2: PERSON TRIP GEN (UPDATED 2018) - PLACETYPE

Daily Person Trip Rate	4.5
Total Daily Person Trips	9833
PM Person Trip Rate	0.4
Total PM Person Trips	874

STEP 3: PM MODE SPLIT (UPDATED 2018) - PLACETYPE

Auto Split	40%	3923
Taxi TNC Split	4%	344
Public Transit	19%	1849
Walk	34%	3323
Bike	4%	374

STEP 4: OD PERSON TRIPS BY TRIP PURPOSE AND DIRECTION - DISTRICT

Outbound

		1 Downtown/ NorthBeach	2 SoMa	3 Marina/Western Market	4 Mission/Potrero	5 OuterMission/Hills	6 Bayshore	7 Richmond	8 Sunset	9 Islands	10 South Bay	11 East Bay	12 North Bay	Total
Auto Person Trips	**Daily Work Trips**	6.7	2.9	4.2	2.3	2.0	2.9	1.7	4.2	-	420.9	29.8	2.0	480
	Daily Non-Work Trips	3.6	3.4	4.3	2.1	7.2	0.9	0.6	8.7	-	1,435.9	12.0	0.2	1,479
Taxi / TNC Person Trips	**Daily Work Trips**	0.6	0.3	0.4	0.2	0.2	0.3	0.1	0.4	-	36.9	2.6	0.2	42
	Daily Non-Work Trips	0.3	0.3	0.4	0.2	0.6	0.1	0.1	0.8	-	126.0	1.0	0.0	130
Transit Person Trips	**Daily Work Trips**	108.7	12.3	3.1	5.5	-	-	-	6.5	-	432.5	33.2	4.4	606
	Daily Non-Work Trips	9.7	1.9	1.6	14.3	4.1	-	0.9	11.1	-	328.1	11.9	-	384
Auto VehicleTrips*	**Daily Work Trips**	6.6	2.9	4.1	2.2	2.0	2.9	1.7	4.1	-	394.5	28.9	1.9	452
	Daily Non-Work Trips	1.6	1.8	3.7	1.2	3.8	0.3	0.4	5.0	-	871.1	8.8	0.2	898
Taxi / TNC Vehicle Trips*	**Daily Work Trips**	0.3	0.2	0.2	0.1	0.1	0.2	0.1	0.2	-	22.1	1.6	0.1	25
	Daily Non-Work Trips	0.2	0.2	0.2	0.1	0.4	0.0	0.0	0.5	-	75.4	0.6	0.0	78

Inbound

		1 Downtown/ NorthBeach	2 SoMa	3 Marina/Western Market	4 Mission/Potrero	5 OuterMission/Hills	6 Bayshore	7 Richmond	8 Sunset	9 Islands	10 South Bay	11 East Bay	12 North Bay	Total
Auto Person Trips	**Daily Work Trips**	5.3	1.3	5.0	1.9	3.1	3.2	1.7	3.2	-	371.9	17.2	1.8	416
	Daily Non-Work Trips	2.2	5.9	6.6	1.9	7.2	1.4	1.4	16.0	-	1,492.4	13.0	0.9	1,549
Taxi / TNC Person Trips	**Daily Work Trips**	0.5	0.1	0.4	0.2	0.3	0.3	0.2	0.3	-	32.6	1.5	0.2	36
	Daily Non-Work Trips	0.2	0.5	0.6	0.2	0.6	0.1	0.1	1.4	-	130.9	1.1	0.1	136
Transit Person Trips	**Daily Work Trips**	114.4	20.2	3.1	4.2	-	-	-	-	-	312.9	33.2	-	488
	Daily Non-Work Trips	17.4	1.3	6.2	0.5	-	-	0.9	11.1	-	325.4	8.0	-	371
Auto VehicleTrips*	**Daily Work Trips**	5.2	1.3	5.0	1.8	2.6	3.2	1.7	3.2	-	346.5	16.4	1.8	389
	Daily Non-Work Trips	1.6	3.3	5.8	1.1	3.6	1.3	1.3	8.8	-	942.8	9.5	0.7	980
Taxi / TNC Vehicle Trips*	**Daily Work Trips**	0.3	0.1	0.3	0.1	0.2	0.2	0.1	0.2	-	19.5	0.9	0.1	22
	Daily Non-Work Trips	0.1	0.3	0.3	0.1	0.4	0.1	0.1	0.8	-	78.4	0.7	0.0	81

*Auto vehicle trips based on rolling up of shared ride 2, shared ride 3, and drive alone person trips divided by an AVO of 2,3.5, and 1, respectively; Taxi/TNC Vehicle trips based on a AVO of 1.67 based on Bruce Schaller's TNC Study of NYC

CHTS Trips for District

Outbound

		1	2	3	4	5	6	7	8	9	10	11	12
Drive Alone	**Daily Work Trips**	8,206	3,633	5,160	2,753	2,550	3,712	2,101	5,176	-	468,432	35,545	2,129
	Daily Non-Work Trips	917	956	3,886	627	2,357	-	268	3,642	-	612,740	8,142	295
Shared Ride 2	**Daily Work Trips**	215	-	132	99	-	-	-	155	-	57,075	1,948	393
	Daily Non-Work Trips	459	1,779	1,483	1,596	2,220	-	417	2,904	-	677,641	4,418	-
Shared Ride 3	**Daily Work Trips**	-	-	-	116	-	-	-	-	-	6,036	180	61
	Daily Non-Work Trips	3,162	1,629	61	435	4,545	1,121	106	4,508	-	525,642	2,594	-
Taxi	**Daily Work Trips**	-	-	-	-	-	-	-	-	-	1,254	-	-
	Daily Non-Work Trips	-	-	-	-	-	-	-	-	-	1,847	-	-
Transit	**Daily Work Trips**	12,463	1,415	356	627	-	-	-	747	-	49,571	3,804	503
	Daily Non-Work Trips	1,115	216	179	1,638	475	-	104	1,272	-	37,602	1,359	-

Inbound

		1	2	3	4	5	6	7	8	9	10	11	12
Drive Alone	**Daily Work Trips**	6,561	1,545	6,222	2,073	2,975	4,064	2,185	3,992	-	410,737	19,849	2,144
	Daily Non-Work Trips	1,601	1,588	6,507	530	2,053	1,477	1,386	7,266	-	706,938	8,711	833
Shared Ride 2	**Daily Work Trips**	154	89	132	275	-	-	-	122	-	49,464	1,775	175
	Daily Non-Work Trips	517	4,252	1,682	1,585	2,086	309	417	1,002	-	687,015	5,355	-
Shared Ride 3	**Daily Work Trips**	-	-	-	116	950	-	-	-	-	10,219	180	-
	Daily Non-Work Trips	717	1,629	183	267	4,959	-	-	11,996	-	490,147	2,360	244
Taxi	**Daily Work Trips**	-	-	-	-	-	-	-	-	-	378	-	-
	Daily Non-Work Trips	-	-	-	-	-	-	-	-	-	5,178	-	-
Transit	**Daily Work Trips**	13,112	2,312	356	477	-	-	-	-	-	35,858	3,804	-
	Daily Non-Work Trips	1,996	148	712	61	-	-	104	1,272	-	37,300	913	-

CHTS Summarized Trips

		1	2	3	4	5	6	7	8	9	10	11	12
Vehicle Drive Trips	**Daily Work Trips**	8,313	3,633	5,226	2,836	2,550	3,712	2,101	5,253	-	499,445	36,570	2,343
	Daily Non-Work Trips	2,050	2,311	4,645	1,549	4,765	320	507	6,382	-	#######	11,092	295
Vehicle Person Trips	**Daily Work Trips**	8,420	3,633	5,292	2,968	2,550	3,712	2,101	5,331	-	532,797	37,672	2,583
	Daily Non-Work Trips	4,538	4,364	5,429	2,658	9,122	1,121	791	11,055	-	#######	15,154	295
Vehicle Occupancy	**Daily Work Trips**	1.01	1.00	1.01	1.05	1.00	1.00	1.00	1.01	-	1.07	1.03	1.10
	Daily Non-Work Trips	2.21	1.89	1.17	1.72	1.91	3.50	1.56	1.73	-	1.65	1.37	1.00
Transit Trips	**Daily Work Trips**	12,463	1,415	356	627	-	-	-	747	-	49,571	3,804	503
	Daily Non-Work Trips	1,115	216	179	1,638	475	-	104	1,272	-	37,602	1,359	-

		1	2	3	4	5	6	7	8	9	10	11	12
Vehicle Drive Trips	**Daily Work Trips**	6,637	1,590	6,288	2,243	3,247	4,064	2,185	4,053	-	438,615	20,788	2,231
	Daily Non-Work Trips	2,065	4,179	7,400	1,399	4,513	1,632	1,595	11,195	-	#######	12,063	903
Vehicle Person Trips	**Daily Work Trips**	6,714	1,634	6,353	2,464	3,925	4,064	2,185	4,114	-	470,798	21,804	2,318
	Daily Non-Work Trips	2,836	7,468	8,372	2,382	9,098	1,787	1,803	20,265	-	#######	16,426	1,077
Vehicle Occupancy	**Daily Work Trips**	1.01	1.03	1.01	1.10	1.21	1.00	1.00	1.02	-	1.07	1.05	1.04
	Daily Non-Work Trips	1.37	1.79	1.13	1.70	2.02	1.09	1.13	1.81	-	1.58	1.36	1.19
Transit Trips	**Daily Work Trips**	13,112	2,312	356	477	-	-	-	-	-	35,858	3,804	-
	Daily Non-Work Trips	1,996	148	712	61	-	-	104	1,272	-	37,300	913	-

CHTS Trip Shares

		1	2	3	4	5	6	7	8	9	10	11	12
Vehicle Drive Trips	**Daily Work Trips**	0%	0%	0%	0%	0%	0%	0%	0%	0%	15%	1%	0%
	Daily Non-Work Trips	0%	0%	0%	0%	0%	0%	0%	0%	0%	32%	0%	0%
Vehicle Person Trips	**Daily Work Trips**	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	1%	0%
	Daily Non-Work Trips	0%	0%	0%	0%	0%	0%	0%	0%	0%	37%	0%	0%
Transit Trips	**Daily Work Trips**	6%	1%	0%	0%	0%	0%	0%	0%	0%	23%	2%	0%
	Daily Non-Work Trips	1%	0%	0%	1%	0%	0%	0%	1%	0%	18%	1%	0%

		1	2	3	4	5	6	7	8	9	10	11	12
Vehicle Drive Trips	**Daily Work Trips**	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	1%	0%
	Daily Non-Work Trips	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%	0%
Vehicle Person Trips	**Daily Work Trips**	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	0%	0%
	Daily Non-Work Trips	0%	0%	0%	0%	0%	0%	0%	0%	0%	38%	0%	0%
Transit Trips	**Daily Work Trips**	6%	1%	0%	0%	0%	0%	0%	0%	0%	17%	2%	0%
	Daily Non-Work Trips	1%	0%	0%	1%	0%	0%	0%	1%	0%	18%	0%	0%

STEP 1: INPUTS

Land Use	Off
Amount	10
TAZ	915
Distribute By	District
Taxi/TNC Occupancy	1.67
Place Type	3
District Number	10
District Name	Outer Mission

STEP 2: PERSON TRIP GEN (UPDATED 2018) - PLACETYPE

Daily Person Trip Rate	15.7
Total Daily Person Trips	157
PM Person Trip Rate	1.4
Total PM Person Trips	14

STEP 3: PM MODE SPLIT (UPDATED 2018) - PLACETYPE

Auto Split	69%	109
Taxi TNC Split	2%	3
Public Transit	4%	6
Walk	6%	9
Bike	1%	1

STEP 4: OD PERSON TRIPS BY TRIP PURPOSE AND DIRECTION - DISTRICT

		Outbound													*Inbound*												
		1 Downtown/ NorthBeach	2 SoMa	3 Marina/Wes ternMarket	4 Mission/Pot rero	5 OuterMissio n/Hills	6 Bayshore	7 Richmond	8 Sunset	9 Islands	10 South Bay	11 East Bay	12 North Bay	Total	1 Downtown/ NorthBeach	2 SoMa	3 Marina/Wes ternMarket	4 Mission/Pot rero	5 OuterMissio n/Hills	6 Bayshore	7 Richmond	8 Sunset	9 Islands	10 South Bay	11 East Bay	12 North Bay	Total
Auto Person Trips	**Daily Work Trips**	0.2	0.0	0.1	0.3	0.5	0.1	0.2	0.4	-	47.1	3.9	0.1	53	0.2	0.2	0.1	0.1	0.5	0.1	0.1	0.3	-	47.0	3.7	0.1	52
	Daily Non-Work Trips	-	-	-	0.0	-	-	-	-	-	1.7	0.1	-	2	0.0	-	0.0	0.0	-	-	-	-	-	1.8	0.0	-	2
Taxi / TNC Person Trips	**Daily Work Trips**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	1.4	0.1	0.0	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	1.4	0.1	0.0	2
	Daily Non-Work Trips	-	-	-	0.0	-	-	-	-	-	0.0	0.0	-	0	0.0	-	0.0	0.0	-	-	-	-	-	0.1	0.0	-	0
Transit Person Trips	**Daily Work Trips**	0.2	0.0	0.0	0.1	0.0	-	-	0.0	-	1.9	0.4	-	3	0.2	0.0	0.0	0.0	0.0	-	-	-	-	2.1	0.5	-	3
	Daily Non-Work Trips	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Auto VehicleTrips*	**Daily Work Trips**	0.1	0.0	0.1	0.3	0.5	0.1	0.1	0.4	-	43.2	3.7	0.1	49	0.2	0.2	0.1	0.1	0.4	0.1	0.0	0.3	-	43.4	3.6	0.1	48
	Daily Non-Work Trips	-	-	-	0.0	-	-	-	-	-	1.3	0.1	-	1	0.0	-	0.0	0.0	-	-	-	-	-	1.4	0.0	-	1
Taxi / TNC Vehicle Trips*	**Daily Work Trips**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.8	0.1	0.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.8	0.1	0.0	1
	Daily Non-Work Trips	-	-	-	0.0	-	-	-	-	-	0.0	0.0	-	0	0.0	-	0.0	0.0	-	-	-	-	-	0.0	0.0	-	0

*Auto vehicle trips based on rolling up of shared ride 2, shared ride 3, and drive alone person trips divided by an AVO of 2,3.5, and 1, respectively; Taxi/TNC Vehicle trips based on a AVO of 1.67 based on Bruce Schaller's TNC Study of NYC

CHTS Trips for District		*Outbound*												*Inbound*											
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Drive Alone	**Daily Work Trips**	1,060	166	2,076	4,229	5,551	732	470	5,371	-	568,949	51,052	1,363	1,426	2,215	1,828	1,301	5,797	1,002	474	4,335	-	576,027	49,900	1,718
	Daily Non-Work Trips	-	-	-	-	-	-	-	-	-	13,518	686	-	-	-	61	-	-	-	-	-	-	14,901	257	-
Shared Ride 2	**Daily Work Trips**	902	-	-	286	807	61	2,818	-	-	82,928	2,941	-	1,703	-	-	286	-	61	349	-	-	74,491	943	-
	Daily Non-Work Trips	-	-	-	-	-	-	-	-	-	7,938	891	-	61	-	-	-	-	-	-	-	-	7,235	390	-
Shared Ride 3	**Daily Work Trips**	224	-	-	-	-	-	-	-	-	18,046	1,957	-	-	-	-	-	-	-	-	-	-	20,028	2,236	-
	Daily Non-Work Trips	-	-	-	61	-	-	-	-	-	2,002	-	-	-	-	-	-	-	-	-	-	-	3,016	-	-
Taxi	**Daily Work Trips**	-	317	-	-	898	-	-	-	-	3,509	-	-	-	317	-	84	876	-	-	-	-	1,193	-	-
	Daily Non-Work Trips	-	-	-	-	-	-	-	-	-	210	-	-	-	-	-	61	-	-	-	-	-	210	-	-
Transit	**Daily Work Trips**	3,565	61	970	1,309	644	-	-	61	-	37,104	8,923	-	4,372	61	807	746	644	-	-	-	-	42,528	10,511	-
	Daily Non-Work Trips	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHTS Summarized Trips																									
Vehicle Drive Trips	**Daily Work Trips**	1,575	355	2,076	4,372	6,493	763	1,879	5,371	-	617,670	53,081	1,363	2,277	2,405	1,828	1,494	6,321	1,033	648	4,335	-	619,709	51,011	1,718
	Daily Non-Work Trips	-	-	-	17	-	-	-	-	-	18,184	1,132	-	31	-	61	37	-	-	-	-	-	19,506	452	-
Vehicle Person Trips	**Daily Work Trips**	2,186	483	2,076	4,515	7,257	793	3,288	5,371	-	673,432	55,950	1,363	3,129	2,532	1,828	1,671	6,672	1,063	823	4,335	-	671,740	53,080	1,718
	Daily Non-Work Trips	-	-	-	61	-	-	-	-	-	23,667	1,578	-	61	-	61	61	-	-	-	-	-	25,362	647	-
Vehicle Occupancy	**Daily Work Trips**	1.39	1.36	1.00	1.03	1.12	1.04	1.75	1.00	-	1.09	1.05	1.00	1.37	1.05	1.00	1.12	1.06	1.03	1.27	1.00	-	1.08	1.04	1.00
	Daily Non-Work Trips	-	-	-	3.50	-	-	-	-	-	1.30	1.39	-	2.00	-	1.00	1.67	-	-	-	-	-	1.30	1.43	-
Transit Trips	**Daily Work Trips**	3,565	61	970	1,309	644	-	-	61	-	37,104	8,923	-	4,372	61	807	746	644	-	-	-	-	42,528	10,511	-
	Daily Non-Work Trips	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CHTS Trip Shares																									
Vehicle Drive Trips	**Daily Work Trips**	0%	0%	0%	0%	0%	0%	0%	0%	0%	43%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	43%	4%	0%
	Daily Non-Work Trips	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%
Vehicle Person Trips	**Daily Work Trips**	0%	0%	0%	0%	0%	0%	0%	0%	0%	43%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	43%	3%	0%
	Daily Non-Work Trips	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%
Transit Trips	**Daily Work Trips**	3%	0%	1%	1%	1%	0%	0%	0%	0%	33%	8%	0%	4%	0%	1%	1%	1%	0%	0%	0%	0%	38%	9%	0%
	Daily Non-Work Trips	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

STEP 1: INPUTS

Land Use	Ret
Amount	21
TAZ	915
Distribute By	District
Taxi/TNC Occupancy	1.67
Place Type	3
District Number	10
District Name	Outer Mission

STEP 2: PERSON TRIP GEN (UPDATED 2018) - PLACETYPE

Daily Person Trip Rate	150
Total Daily Person Trips	3150
PM Person Trip Rate	13.5
Total PM Person Trips	283.5

STEP 3: PM MODE SPLIT (UPDATED 2018) - PLACETYPE

Auto Split	54%	1710
Taxi TNC Split	1%	32
Public Transit	16%	495
Walk	28%	866
Bike	1%	35

STEP 4: OD PERSON TRIPS BY TRIP PURPOSE AND DIRECTION - DISTRICT

		Outbound													*Inbound*												
		1 Downtown/ NorthBeach	2 SoMa	3 Marina/ WesternMarket	4 Mission/Potrero	5 OuterMission/Hills	6 Bayshore	7 Richmond	8 Sunset	9 Islands	10 South Bay	11 East Bay	12 North Bay	Total	1 Downtown/ NorthBeach	2 SoMa	3 Marina/ WesternMarket	4 Mission/Potrero	5 OuterMission/Hills	6 Bayshore	7 Richmond	8 Sunset	9 Islands	10 South Bay	11 East Bay	12 North Bay	Total
Auto Person Trips	**Daily Work Trips**	0.8	0.0	0.5	0.4	1.2	0.6	0.2	0.5	-	110.0	5.3	0.0	120	1.3	0.3	0.6	0.7	0.4	0.6	0.2	0.7	-	124.1	7.7	0.1	137
	Daily Non-Work Trips	0.6	1.0	1.8	0.7	5.4	0.5	0.8	5.7	-	706.8	12.4	0.5	736	1.6	0.4	1.9	1.2	4.1	0.6	0.8	3.9	-	690.6	12.3	0.7	718
Taxi / TNC Person Trips	**Daily Work Trips**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	2.0	0.1	0.0	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	2.3	0.1	0.0	3
	Daily Non-Work Trips	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	-	13.0	0.2	0.0	14	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	-	12.7	0.2	0.0	13
Transit Person Trips	**Daily Work Trips**	4.1	-	-	0.8	1.4	-	8.1	-	-	41.1	3.9	-	59	2.5	7.0	-	-	0.3	-	8.1	-	-	65.0	2.9	-	86
	Daily Non-Work Trips	6.1	1.3	-	5.6	2.1	-	-	-	-	151.7	5.2	3.5	176	2.4	1.3	-	7.4	2.1	-	-	-	-	152.4	4.5	3.5	174
Auto VehicleTrips*	**Daily Work Trips**	0.7	0.0	0.5	0.3	1.1	0.6	0.1	0.5	-	97.2	4.4	0.0	105	1.2	0.3	0.5	0.6	0.3	0.5	0.2	0.7	-	110.2	6.7	0.1	121
	Daily Non-Work Trips	0.4	0.5	1.1	0.7	3.2	0.3	0.6	3.1	-	440.6	7.7	0.3	459	0.7	0.3	1.2	0.7	2.1	0.3	0.5	2.6	-	420.3	8.0	0.5	437
Taxi / TNC Vehicle Trips*	**Daily Work Trips**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	1.2	0.1	0.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	1.4	0.1	0.0	2
	Daily Non-Work Trips	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	-	7.8	0.1	0.0	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	7.6	0.1	0.0	8

*Auto vehicle trips based on rolling up of shared ride 2, shared ride 3, and drive alone person trips divided by an AVO of 2,3.5, and 1, respectively; Taxi/TNC Vehicle trips based on a AVO of 1.67 based on Bruce Schaller's TNC Study of NYC

CHTS Trips for District		*Outbound*												*Inbound*											
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Drive Alone	**Daily Work Trips**	2,627	122	2,352	616	4,109	2,154	520	2,268	-	392,294	16,433	-	5,490	1,487	1,743	2,309	986	1,823	858	3,151	-	442,911	26,356	175
	Daily Non-Work Trips	941	231	3,485	2,889	5,033	797	1,564	8,699	-	#######	17,935	808	570	1,140	3,709	1,212	3,456	434	445	7,434	-	#######	19,418	1,472
Shared Ride 2	**Daily Work Trips**	801	-	-	303	1,359	717	211	69	-	81,702	6,799	-	-	-	648	152	650	717	-	69	-	97,749	7,260	-
	Daily Non-Work Trips	1,366	4,403	1,251	93	17,040	1,395	2,236	3,020	-	#######	28,147	476	3,602	672	2,403	4,126	7,267	2,132	3,217	6,085	-	#######	29,009	845
Shared Ride 3	**Daily Work Trips**	335	-	-	-	-	-	-	-	-	23,775	900	-	335	-	233	-	-	-	-	-	-	17,610	1,006	-
	Daily Non-Work Trips	224	-	3,222	241	1,984	-	-	14,140	-	810,160	10,162	433	3,266	-	2,310	-	7,318	-	-	4,334	-	844,641	7,244	354
Taxi	**Daily Work Trips**	-	-	-	815	-	-	-	-	-	61	-	140	-	-	-	815	-	-	-	-	-	3,253	-	140
	Daily Non-Work Trips	-	-	-	-	394	-	-	-	-	6,718	-	518	-	-	-	-	394	-	-	-	-	3,387	-	518
Transit	**Daily Work Trips**	1,407	-	-	275	475	-	2,818	-	-	14,202	1,345	-	871	2,413	-	-	101	-	2,818	-	-	22,491	1,010	-
	Daily Non-Work Trips	2,121	449	-	1,946	739	-	-	-	-	52,482	1,809	1,208	843	449	-	2,550	739	-	-	-	-	52,723	1,554	1,208
CHTS Summarized Trips																									
Vehicle Drive Trips	**Daily Work Trips**	3,123	122	2,352	1,255	4,789	2,512	625	2,302	-	439,974	20,090	84	5,586	1,487	2,134	2,873	1,312	2,182	858	3,185	-	498,765	30,273	258
	Daily Non-Work Trips	1,688	2,432	5,031	3,004	14,356	1,495	2,682	14,249	-	#######	34,912	1,480	3,304	1,476	5,571	3,276	9,416	1,500	2,054	11,715	-	#######	35,992	2,305
Vehicle Person Trips	**Daily Work Trips**	3,764	122	2,352	1,734	5,469	2,871	731	2,336	-	497,832	24,132	140	5,826	1,487	2,625	3,275	1,637	2,540	858	3,219	-	561,523	34,622	314
	Daily Non-Work Trips	2,531	4,634	7,958	3,222	24,452	2,192	3,800	25,859	-	#######	56,244	2,235	7,438	1,812	8,422	5,339	18,436	2,565	3,662	17,853	-	#######	55,670	3,188
Vehicle Occupancy	**Daily Work Trips**	1.20	1.00	1.00	1.38	1.14	1.14	1.17	1.01	-	1.13	1.20	1.67	1.04	1.00	1.23	1.14	1.25	1.16	1.00	1.01	-	1.13	1.14	1.22
	Daily Non-Work Trips	1.50	1.91	1.58	1.07	1.70	1.47	1.42	1.81	-	1.60	1.61	1.51	2.25	1.23	1.51	1.63	1.96	1.71	1.78	1.52	-	1.64	1.55	1.38
Transit Trips	**Daily Work Trips**	1,407	-	-	275	475	-	2,818	-	-	14,202	1,345	-	871	2,413	-	-	101	-	2,818	-	-	22,491	1,010	-
	Daily Non-Work Trips	2,121	449	-	1,946	739	-	-	-	-	52,482	1,809	1,208	843	449	-	2,550	739	-	-	-	-	52,723	1,554	1,208
CHTS Trip Shares																									
Vehicle Drive Trips	**Daily Work Trips**	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	1%	0%
	Daily Non-Work Trips	0%	0%	0%	0%	0%	0%	0%	0%	0%	39%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	37%	1%	0%
Vehicle Person Trips	**Daily Work Trips**	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	0%	0%
	Daily Non-Work Trips	0%	0%	0%	0%	0%	0%	0%	0%	0%	41%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	1%	0%
Transit Trips	**Daily Work Trips**	1%	0%	0%	0%	0%	0%	2%	0%	0%	8%	1%	0%	1%	1%	0%	0%	0%	0%	2%	0%	0%	13%	1%	0%
	Daily Non-Work Trips	1%	0%	0%	1%	0%	0%	0%	0%	0%	31%	1%	1%	0%	0%	0%	1%	0%	0%	0%	0%	0%	31%	1%	1%

Appendix A2: Travel Demand Calculations for Comparable Project to Additional Housing Option

OD PERSON TRIPS BY TRIP PURPOSE AND DIRECTION - DISTRICT

		Outbound												
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	
		Downtown/ NorthBeach	SoMa	Marina/West ernMarket	Mission/Potr ero	OuterMissio n/Hills	Bayshore	Richmond	Sunset	Islands	South Bay	East Bay	North Bay	Total
Auto Person Trips	**Daily Work Trips**	12.2	4.3	5.0	3.2	1.8	2.7	1.8	5.6	0.0	303.9	289.3	109.2	739
	Daily Non-Work Trips	5.4	4.1	5.6	4.2	7.8	9.1	1.3	7.3	0.0	938.3	979.5	296.7	2,259
Taxi / TNC Person Trips	**Daily Work Trips**	1.0	0.4	0.4	0.3	0.1	0.2	0.1	0.5	0.0	24.1	22.9	8.7	59
	Daily Non-Work Trips	0.4	0.3	0.5	0.3	0.6	0.8	0.1	0.6	0.0	74.9	77.9	23.5	180
Transit Person Trips	**Daily Work Trips**	222.0	58.0	21.9	12.4	1.1	-	2.0	10.8	-	265.9	192.3	8.7	795
	Daily Non-Work Trips	67.8	6.1	20.0	12.6	11.7	0.8	0.5	13.6	-	189.5	277.0	25.8	625
Auto VehicleTrips*	**Daily Work Trips**	10.8	3.3	4.8	2.9	1.7	2.6	1.7	4.7	0.0	284.3	274.2	103.3	694
	Daily Non-Work Trips	3.1	2.4	4.0	2.9	4.0	4.3	0.7	4.3	0.0	572.2	605.4	197.1	1,400
Taxi / TNC Vehicle Trips*	**Daily Work Trips**	0.6	0.2	0.3	0.2	0.1	0.1	0.1	0.3	0.0	14.5	13.7	5.2	35
	Daily Non-Work Trips	0.3	0.2	0.3	0.2	0.4	0.5	0.1	0.3	0.0	44.8	46.6	14.1	108

*Auto vehicle trips based on rolling up of shared ride 2, shared ride 3, and drive alone person trips divided by an AVO of 2,3.5, and 1, respectively; Taxi/TNC Vehicle trips based on a AVO of 1.67 bas

OD PERSON TRIPS BY TRIP PURPOSE AND DIRECTION - D

Inbound

		1	2	3	4	5	6	7	8	9	10	11	12	
		Downtown/ NorthBeach	SoMa	Marina/West ernMarket	Mission/Potr ero	OuterMissio n/Hills	Bayshore	Richmond	Sunset	Islands	South Bay	East Bay	North Bay	Total
Auto Person Trips	**Daily Work Trips**	9.7	2.4	6.1	2.0	2.3	2.8	1.6	5.1	0.2	277.3	256.3	96.6	662
	Daily Non-Work Trips	5.5	5.9	6.9	6.5	8.4	6.9	2.4	12.1	0.1	966.4	1,012.3	313.6	2,347
Taxi / TNC Person Trips	**Daily Work Trips**	0.8	0.2	0.5	0.1	0.2	0.2	0.1	0.4	0.0	21.6	19.8	7.5	52
	Daily Non-Work Trips	0.5	0.5	0.6	0.5	0.7	0.5	0.2	1.0	0.0	77.5	80.9	25.1	188
Transit Person Trips	**Daily Work Trips**	197.8	60.9	6.1	9.4	0.5	-	1.0	5.0	-	204.8	169.2	2.1	657
	Daily Non-Work Trips	52.9	3.9	25.8	9.3	2.5	9.3	0.4	15.0	-	188.9	274.9	13.4	596
Auto VehicleTrips*	**Daily Work Trips**	8.8	2.0	5.5	1.9	2.0	2.8	1.5	4.2	0.2	257.4	241.3	90.6	618
	Daily Non-Work Trips	2.9	3.6	5.5	4.4	4.8	4.2	1.6	6.7	0.1	608.8	642.1	213.3	1,498
Taxi / TNC Vehicle Trips*	**Daily Work Trips**	0.5	0.1	0.3	0.1	0.1	0.1	0.1	0.3	0.0	13.0	11.8	4.5	31
	Daily Non-Work Trips	0.3	0.3	0.3	0.3	0.4	0.3	0.1	0.6	0.0	46.4	48.5	15.0	113

*Auto vehicle trips based on rolling up of shared ride 2,ed on Bruce Schaller's TNC Study of NYC

STEP 1: INPUTS

Land Use	Res
Amount	2945
TAZ	915
Distribute By	Placetype
Taxi/TNC Occupancy	1.67
Place Type	3
District Number	10
District Name	Outer Mission

STEP 2: PERSON TRIP GEN (UPDATED 2018) - PLACETYPE

Daily Person Trip Rate	4.5
Total Daily Person Trips	13253
PM Person Trip Rate	0.4
Total PM Person Trips	1178

STEP 3: PM MODE SPLIT (UPDATED 2018) - PLACETYPE

Auto Split	40%	5288
Taxi TNC Split	4%	464
Public Transit	19%	2491
Walk	34%	4479
Bike	4%	504

STEP 4: OD PERSON TRIPS BY TRIP PURPOSE AND DIRECTION - DISTRICT

		Outbound													*Inbound*												
		1 Downtown/ NorthBeach	2 SoMa	3 Marina/West ernMarket	4 Mission/Potr ero	5 OuterMissio n/Hills	6 Bayshore	7 Richmond	8 Sunset	9 Islands	10 South Bay	11 East Bay	12 North Bay	Total	1 Downtown/ NorthBeach	2 SoMa	3 Marina/West ernMarket	4 Mission/Potr ero	5 OuterMissio n/Hills	6 Bayshore	7 Richmond	8 Sunset	9 Islands	10 South Bay	11 East Bay	12 North Bay	Total
Auto Person Trips	**Daily Work Trips**	11.6	4.2	4.7	2.9	1.1	2.4	1.6	5.2	-	264.1	249.6	95.7	643	9.1	2.1	5.7	1.6	1.7	2.6	1.4	4.6	0.2	235.1	214.2	82.1	561
	Daily Non-Work Trips	5.0	3.7	5.1	3.9	6.8	8.6	1.0	6.2	-	830.7	863.3	260.6	1,995	5.1	5.7	6.5	6.2	7.5	6.1	2.2	11.4	0.1	861.1	898.7	278.7	2,089
Taxi / TNC Person Trips	**Daily Work Trips**	1.0	0.4	0.4	0.3	0.1	0.2	0.1	0.5	-	23.2	21.9	8.4	56	0.8	0.2	0.5	0.1	0.2	0.2	0.1	0.4	0.0	20.6	18.8	7.2	49
	Daily Non-Work Trips	0.4	0.3	0.5	0.3	0.6	0.8	0.1	0.5	-	72.9	75.7	22.9	175	0.4	0.5	0.6	0.5	0.7	0.5	0.2	1.0	0.0	75.5	78.8	24.4	183
Transit Person Trips	**Daily Work Trips**	218.5	56.6	21.6	11.7	0.9	-	0.9	9.6	-	259.7	186.5	8.4	774	192.2	59.5	5.7	8.9	0.3	-	-	3.4	-	195.1	160.2	1.8	627
	Daily Non-Work Trips	66.3	5.6	18.7	11.6	11.4	-	0.4	12.3	-	169.7	242.2	23.2	561	49.4	3.3	25.7	7.9	2.1	9.3	0.4	13.7	-	168.8	238.4	9.6	529
Auto VehicleTrips*	**Daily Work Trips**	10.3	3.2	4.5	2.6	1.1	2.4	1.6	4.3	-	248.4	237.8	90.9	607	8.3	1.8	5.2	1.5	1.4	2.6	1.4	3.8	0.2	219.1	202.5	77.3	525
	Daily Non-Work Trips	3.0	2.2	3.7	2.7	3.3	4.0	0.5	3.6	-	504.9	531.8	172.8	1,233	2.8	3.4	5.2	4.2	4.3	3.8	1.5	6.3	0.1	544.6	571.5	190.3	1,338
Taxi / TNC Vehicle Trips*	**Daily Work Trips**	0.6	0.2	0.2	0.2	0.1	0.1	0.1	0.3	-	13.9	13.1	5.0	34	0.5	0.1	0.3	0.1	0.1	0.1	0.1	0.2	0.0	12.4	11.3	4.3	29
	Daily Non-Work Trips	0.3	0.2	0.3	0.2	0.4	0.4	0.1	0.3	-	43.6	45.3	13.7	105	0.3	0.3	0.3	0.3	0.4	0.3	0.1	0.6	0.0	45.2	47.2	14.6	110

*Auto vehicle trips based on rolling up of shared ride 2, shared ride 3, and drive alone person trips divided by an AVO of 2,3.5, and 1, respectively; Taxi/TNC Vehicle trips based on a AVO of 1.67 based on Bruce Schaller's TNC Study of NYC

CHTS Trips for District		*Outbound*												*Inbound*												
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
Drive Alone	**Daily Work Trips**	8,206	3,633	5,160	2,753	2,550	3,712	2,101	5,176	-	468,432	35,545	2,129	6,561	1,545	6,222	2,073	2,975	4,064	2,185	3,992	-	410,737	19,849	2,144	
	Daily Non-Work Trips	917	956	3,886	627	2,357	-	268	3,642	-	612,740	8,142	295	1,601	1,588	6,507	530	2,053	1,477	1,386	7,266	-	706,938	8,711	833	
Shared Ride 2	**Daily Work Trips**	215	-	132	99	-	-	-	155	-	57,075	1,948	393	154	89	132	275	-	-	-	122	-	49,464	1,775	175	
	Daily Non-Work Trips	459	1,779	1,483	1,596	2,220	-	417	2,904	-	677,641	4,418	-	517	4,252	1,682	1,585	2,086	309	417	1,002	-	687,015	5,355	-	
Shared Ride 3	**Daily Work Trips**	-	-	-	116	-	-	-	-	-	6,036	180	61	-	-	-	116	950	-	-	-	-	10,219	180	-	
	Daily Non-Work Trips	3,162	1,629	61	435	4,545	1,121	106	4,508	-	525,642	2,594	-	717	1,629	183	267	4,959	-	-	11,996	-	490,147	2,360	244	
Taxi	**Daily Work Trips**	-	-	-	-	-	-	-	-	-	1,254	-	-	-	-	-	-	-	-	-	-	-	378	-	-	
	Daily Non-Work Trips	-	-	-	-	-	-	-	-	-	1,847	-	-	-	-	-	-	-	-	-	-	-	5,178	-	-	
Transit	**Daily Work Trips**	12,463	1,415	356	627	-	-	-	747	-	49,571	3,804	503	13,112	2,312	356	477	-	-	-	-	-	35,858	3,804	-	
	Daily Non-Work Trips	1,115	216	179	1,638	475	-	104	1,272	-	37,602	1,359	-	1,996	148	712	61	-	-	104	1,272	-	37,300	913	-	
CHTS Summarized Trips																										
Vehicle Drive Trips	**Daily Work Trips**	8,313	3,633	5,226	2,836	2,550	3,712	2,101	5,253	-	499,445	36,570	2,343	6,637	1,590	6,288	2,243	3,247	4,064	2,185	4,053	-	438,615	20,788	2,231	1,063,921
	Daily Non-Work Trips	2,050	2,311	4,645	1,549	4,765	320	507	6,382	-	#######	11,092	295	2,065	4,179	7,400	1,399	4,513	1,632	1,595	11,195	-	#######	12,063	903	2,377,300
Vehicle Person Trips	**Daily Work Trips**	8,420	3,633	5,292	2,968	2,550	3,712	2,101	5,331	-	532,797	37,672	2,583	6,714	1,634	6,353	2,464	3,925	4,064	2,185	4,114	-	470,798	21,804	2,318	1,133,432
	Daily Non-Work Trips	4,538	4,364	5,429	2,658	9,122	1,121	791	11,055	-	#######	15,154	295	2,836	7,468	8,372	2,382	9,098	1,787	1,803	20,265	-	#######	16,426	1,077	3,833,190
Vehicle Occupancy	**Daily Work Trips**	1.01	1.00	1.01	1.05	1.00	1.00	1.00	1.01	-	1.07	1.03	1.10	1.01	1.03	1.01	1.10	1.21	1.00	1.00	1.02	-	1.07	1.05	1.04	1.44
	Daily Non-Work Trips	2.21	1.89	1.17	1.72	1.91	3.50	1.56	1.73	-	1.65	1.37	1.00	1.37	1.79	1.13	1.70	2.02	1.09	1.13	1.81	-	1.58	1.36	1.19	
Transit Trips	**Daily Work Trips**	12,463	1,415	356	627	-	-	-	747	-	49,571	3,804	503	13,112	2,312	356	477	-	-	-	-	-	35,858	3,804	-	
	Daily Non-Work Trips	1,115	216	179	1,638	475	-	104	1,272	-	37,602	1,359	-	1,996	148	712	61	-	-	104	1,272	-	37,300	913	-	
CHTS Trip Shares																										
Vehicle Drive Trips	**Daily Work Trips**	0%	0%	0%	0%	0%	0%	0%	0%	0%	15%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	1%	0%	
	Daily Non-Work Trips	0%	0%	0%	0%	0%	0%	0%	0%	0%	32%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	35%	0%	0%	
Vehicle Person Trips	**Daily Work Trips**	0%	0%	0%	0%	0%	0%	0%	0%	0%	11%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	0%	0%	
	Daily Non-Work Trips	0%	0%	0%	0%	0%	0%	0%	0%	0%	37%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	38%	0%	0%	
Transit Trips	**Daily Work Trips**	6%	1%	0%	0%	0%	0%	0%	0%	0%	23%	2%	0%	6%	1%	0%	0%	0%	0%	0%	0%	0%	17%	2%	0%	
	Daily Non-Work Trips	1%	0%	0%	1%	0%	0%	0%	1%	0%	18%	1%	0%	1%	0%	0%	0%	0%	0%	0%	1%	0%	18%	0%	0%	

STEP 1: INPUTS

Land Use	Off
Amount	10
TAZ	915
Distribute By	Placetype
Taxi/TNC Occupancy	1.67
Place Type	3
District Number	10
District Name	Outer Mission

STEP 2: PERSON TRIP GEN (UPDATED 2018) - PLACETYPE

Daily Person Trip Rate	15.7
Total Daily Person Trips	157
PM Person Trip Rate	1.4
Total PM Person Trips	14

STEP 3: PM MODE SPLIT (UPDATED 2018) - PLACETYPE

Auto Split	69%	109
Taxi TNC Split	2%	3
Public Transit	4%	6
Walk	6%	9
Bike	1%	1

STEP 4: OD PERSON TRIPS BY TRIP PURPOSE AND DIRECTION - DISTRICT

		Outbound													*Inbound*												
		1 Downtown/ NorthBeach	2 SoMa	3 Marina/West ernMarket	4 Mission/Potr ero	5 OuterMissio n/Hills	6 Bayshore	7 Richmond	8 Sunset	9 Islands	10 South Bay	11 East Bay	12 North Bay	Total	1 Downtown/ NorthBeach	2 SoMa	3 Marina/West ernMarket	4 Mission/Potr ero	5 OuterMissio n/Hills	6 Bayshore	7 Richmond	8 Sunset	9 Islands	10 South Bay	11 East Bay	12 North Bay	Total
Auto Person Trips	**Daily Work Trips**	0.1	0.0	0.2	0.2	0.4	0.1	0.1	0.3	-	22.7	21.5	6.7	52	0.2	0.1	0.2	0.2	0.4	0.1	0.0	0.3	0.0	22.7	21.5	6.6	52
	Daily Non-Work Trips	0.0	-	-	0.0	0.0	-	-	-	-	0.8	0.8	0.5	2	0.0	-	0.0	0.0	0.0	-	-	-	-	0.8	0.9	0.5	2
Taxi / TNC Person Trips	**Daily Work Trips**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.7	0.6	0.2	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.6	0.2	2
	Daily Non-Work Trips	0.0	-	-	0.0	0.0	-	-	-	-	0.0	0.0	0.0	0	0.0	-	0.0	0.0	0.0	-	-	-	-	0.0	0.0	0.0	0
Transit Person Trips	**Daily Work Trips**	0.1	0.0	0.1	0.1	0.0	-	0.1	0.0	-	1.0	1.2	0.0	3	0.2	0.0	0.1	0.1	0.1	-	0.0	0.0	-	1.2	1.2	0.0	3
	Daily Non-Work Trips	0.0	-	-	-	-	-	-	-	-	-	0.1	-	0	0.0	-	-	-	-	-	-	-	-	-	0.0	-	0
Auto VehicleTrips*	**Daily Work Trips**	0.1	0.0	0.2	0.2	0.4	0.1	0.1	0.3	-	20.8	20.1	6.2	49	0.2	0.1	0.2	0.2	0.4	0.1	0.0	0.3	0.0	21.0	20.2	6.2	49
	Daily Non-Work Trips	0.0	-	-	0.0	0.0	-	-	-	-	0.6	0.7	0.4	2	0.0	-	0.0	0.0	0.0	-	-	-	-	0.6	0.7	0.4	2
Taxi / TNC Vehicle Trips*	**Daily Work Trips**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.4	0.4	0.1	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.1	1
	Daily Non-Work Trips	0.0	-	-	0.0	0.0	-	-	-	-	0.0	0.0	0.0	0	0.0	-	0.0	0.0	0.0	-	-	-	-	0.0	0.0	0.0	0

*Auto vehicle trips based on rolling up of shared ride 2, shared ride 3, and drive alone person trips divided by an AVO of 2,3.5, and 1, respectively; Taxi/TNC Vehicle trips based on a AVO of 1.67 based on Bruce Schaller's TNC Study of NYC

CHTS Trips for District		*Outbound*												*Inbound*												
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	
Drive Alone	**Daily Work Trips**	1,060	166	2,076	4,229	5,551	732	470	5,371	-	568,949	51,052	1,363	1,426	2,215	1,828	1,301	5,797	1,002	474	4,335	-	576,027	49,900	1,718	
	Daily Non-Work Trips	-	-	-	-	-	-	-	-	-	13,518	686	-	-	-	61	-	-	-	-	-	-	14,901	257	-	
Shared Ride 2	**Daily Work Trips**	902	-	-	286	807	61	2,818	-	-	82,928	2,941	-	1,703	-	-	286	-	61	349	-	-	74,491	943	-	
	Daily Non-Work Trips	-	-	-	-	-	-	-	-	-	7,938	891	-	61	-	-	-	-	-	-	-	-	7,235	390	-	
Shared Ride 3	**Daily Work Trips**	224	-	-	-	-	-	-	-	-	18,046	1,957	-	-	-	-	-	-	-	-	-	-	20,028	2,236	-	
	Daily Non-Work Trips	-	-	-	61	-	-	-	-	-	2,002	-	-	-	-	-	-	-	-	-	-	-	3,016	-	-	
Taxi	**Daily Work Trips**	-	317	-	-	898	-	-	-	-	3,509	-	-	-	317	-	84	876	-	-	-	-	1,193	-	-	
	Daily Non-Work Trips	-	-	-	-	-	-	-	-	-	210	-	-	-	-	-	61	-	-	-	-	-	210	-	-	
Transit	**Daily Work Trips**	3,565	61	970	1,309	644	-	-	61	-	37,104	8,923	-	4,372	61	807	746	644	-	-	-	-	42,528	10,511	-	
	Daily Non-Work Trips	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CHTS Summarized Trips																										
Vehicle Drive Trips	**Daily Work Trips**	1,575	355	2,076	4,372	6,493	763	1,879	5,371	-	617,670	53,081	1,363	2,277	2,405	1,828	1,494	6,321	1,033	648	4,335	-	619,709	51,011	1,718	1,387,778
	Daily Non-Work Trips	-	-	-	17	-	-	-	-	-	18,184	1,132	-	31	-	61	37	-	-	-	-	-	19,506	452	-	39,419
Vehicle Person Trips	**Daily Work Trips**	2,186	483	2,076	4,515	7,257	793	3,288	5,371	-	673,432	55,950	1,363	3,129	2,532	1,828	1,671	6,672	1,063	823	4,335	-	671,740	53,080	1,718	1,505,303
	Daily Non-Work Trips	-	-	-	61	-	-	-	-	-	23,667	1,578	-	61	-	61	61	-	-	-	-	-	25,362	647	-	51,497
Vehicle Occupancy	**Daily Work Trips**	1.39	1.36	1.00	1.03	1.12	1.04	1.75	1.00	-	1.09	1.05	1.00	1.37	1.05	1.00	1.12	1.06	1.03	1.27	1.00	-	1.08	1.04	1.00	1.09
	Daily Non-Work Trips	-	-	-	3.50	-	-	-	-	-	1.30	1.39	-	2.00	-	1.00	1.67	-	-	-	-	-	1.30	1.43	-	
Transit Trips	**Daily Work Trips**	3,565	61	970	1,309	644	-	-	61	-	37,104	8,923	-	4,372	61	807	746	644	-	-	-	-	42,528	10,511	-	
	Daily Non-Work Trips	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CHTS Trip Shares																										
Vehicle Drive Trips	**Daily Work Trips**	0%	0%	0%	0%	0%	0%	0%	0%	0%	43%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	43%	4%	0%	
	Daily Non-Work Trips	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	
Vehicle Person Trips	**Daily Work Trips**	0%	0%	0%	0%	0%	0%	0%	0%	0%	43%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	43%	3%	0%	
	Daily Non-Work Trips	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	
Transit Trips	**Daily Work Trips**	3%	0%	1%	1%	1%	0%	0%	0%	0%	33%	8%	0%	4%	0%	1%	1%	1%	0%	0%	0%	0%	38%	9%	0%	
	Daily Non-Work Trips	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	

STEP 1: INPUTS

Land Use	Ret
Amount	7.5
TAZ	915
Distribute By	Placetype
Taxi/TNC Occupancy	1.67
Place Type	3
District Number	10
District Name	Outer Mission

STEP 2: PERSON TRIP GEN (UPDATED 2018) - PLACETYPE

Daily Person Trip Rate	150
Total Daily Person Trips	1125
PM Person Trip Rate	13.5
Total PM Person Trips	101.25

STEP 3: PM MODE SPLIT (UPDATED 2018) - PLACETYPE

Auto Split	54%	611
Taxi TNC Split	1%	11
Public Transit	16%	177
Walk	28%	309
Bike	1%	12

STEP 4: OD PERSON TRIPS BY TRIP PURPOSE AND DIRECTION - DISTRICT

Outbound

		1 Downtown/ NorthBeach	2 SoMa	3 Marina/West ernMarket	4 Mission/Potr ero	5 OuterMissio n/Hills	6 Bayshore	7 Richmond	8 Sunset	9 Islands	10 South Bay	11 East Bay	12 North Bay	Total
Auto Person Trips	**Daily Work Trips**	0.4	0.0	0.1	0.2	0.2	0.1	0.1	0.1	0.0	17.1	18.2	6.9	43
	Daily Non-Work Trips	0.4	0.4	0.5	0.2	1.0	0.6	0.2	1.1	0.0	106.9	115.5	35.6	262
Taxi / TNC Person Trips	**Daily Work Trips**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.1	1
	Daily Non-Work Trips	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.1	0.7	5
Transit Person Trips	**Daily Work Trips**	3.4	1.4	0.2	0.6	0.2	-	1.0	1.1	-	5.2	4.5	0.3	18
	Daily Non-Work Trips	1.6	0.5	1.2	1.0	0.3	0.8	0.0	1.3	-	19.8	34.7	2.6	64
Auto VehicleTrips*	**Daily Work Trips**	0.3	0.0	0.1	0.1	0.2	0.1	0.0	0.1	0.0	15.1	16.3	6.1	39
	Daily Non-Work Trips	0.2	0.2	0.3	0.2	0.6	0.3	0.2	0.6	0.0	66.7	72.9	23.9	166
Taxi / TNC Vehicle Trips*	**Daily Work Trips**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.1	0
	Daily Non-Work Trips	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.3	0.4	3

Inbound

		1 Downtown/ NorthBeach	2 SoMa	3 Marina/West ernMarket	4 Mission/Potr ero	5 OuterMissio n/Hills	6 Bayshore	7 Richmond	8 Sunset	9 Islands	10 South Bay	11 East Bay	12 North Bay	Total
Auto Person Trips	**Daily Work Trips**	0.4	0.2	0.2	0.3	0.1	0.2	0.1	0.1	-	19.5	20.6	7.9	50
	Daily Non-Work Trips	0.4	0.2	0.5	0.3	0.9	0.8	0.2	0.7	-	104.5	112.7	34.4	256
Taxi / TNC Person Trips	**Daily Work Trips**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.4	0.4	0.1	1
	Daily Non-Work Trips	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	1.9	2.1	0.6	5
Transit Person Trips	**Daily Work Trips**	5.4	1.4	0.3	0.4	0.2	-	1.0	1.6	-	8.5	7.8	0.3	27
	Daily Non-Work Trips	3.6	0.6	0.2	1.4	0.4	0.0	-	1.3	-	20.1	36.4	3.8	68
Auto VehicleTrips*	**Daily Work Trips**	0.4	0.2	0.2	0.2	0.1	0.1	0.1	0.1	-	17.3	18.6	7.2	44
	Daily Non-Work Trips	0.2	0.1	0.3	0.2	0.5	0.4	0.1	0.5	-	63.6	69.9	22.7	159
Taxi / TNC Vehicle Trips*	**Daily Work Trips**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.2	0.2	0.1	1
	Daily Non-Work Trips	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	1.2	1.2	0.4	3

*Auto vehicle trips based on rolling up of shared ride 2, shared ride 3, and drive alone person trips divided by an AVO of 2,3.5, and 1, respectively; Taxi/TNC Vehicle trips based on a AVO of 1.67 based on Bruce Schaller's TNC Study of NYC

CHTS Trips for District

Outbound

		1	2	3	4	5	6	7	8	9	10	11	12
Drive Alone	**Daily Work Trips**	2,627	122	2,352	616	4,109	2,154	520	2,268	-	392,294	16,433	-
	Daily Non-Work Trips	941	231	3,485	2,889	5,033	797	1,564	8,699	-	#######	17,935	808
Shared Ride 2	**Daily Work Trips**	801	-	-	303	1,359	717	211	69	-	81,702	6,799	-
	Daily Non-Work Trips	1,366	4,403	1,251	93	17,040	1,395	2,236	3,020	-	#######	28,147	476
Shared Ride 3	**Daily Work Trips**	335	-	-	-	-	-	-	-	-	23,775	900	-
	Daily Non-Work Trips	224	-	3,222	241	1,984	-	-	14,140	-	810,160	10,162	433
Taxi	**Daily Work Trips**	-	-	-	815	-	-	-	-	-	61	-	140
	Daily Non-Work Trips	-	-	-	-	394	-	-	-	-	6,718	-	518
Transit	**Daily Work Trips**	1,407	-	-	275	475	-	2,818	-	-	14,202	1,345	-
	Daily Non-Work Trips	2,121	449	-	1,946	739	-	-	-	-	52,482	1,809	1,208
CHTS Summarized Trips													
Vehicle Drive Trips	**Daily Work Trips**	3,123	122	2,352	1,255	4,789	2,512	625	2,302	-	439,974	20,090	84
	Daily Non-Work Trips	1,688	2,432	5,031	3,004	14,356	1,495	2,682	14,249	-	#######	34,912	1,480
Vehicle Person Trips	**Daily Work Trips**	3,764	122	2,352	1,734	5,469	2,871	731	2,336	-	497,832	24,132	140
	Daily Non-Work Trips	2,531	4,634	7,958	3,222	24,452	2,192	3,800	25,859	-	#######	56,244	2,235
Vehicle Occupancy	**Daily Work Trips**	1.20	1.00	1.00	1.38	1.14	1.14	1.17	1.01	-	1.13	1.20	1.67
	Daily Non-Work Trips	1.50	1.91	1.58	1.07	1.70	1.47	1.42	1.81	-	1.60	1.61	1.51
Transit Trips	**Daily Work Trips**	1,407	-	-	275	475	-	2,818	-	-	14,202	1,345	-
	Daily Non-Work Trips	2,121	449	-	1,946	739	-	-	-	-	52,482	1,809	1,208
CHTS Trip Shares													
Vehicle Drive Trips	**Daily Work Trips**	0%	0%	0%	0%	0%	0%	0%	0%	0%	9%	0%	0%
	Daily Non-Work Trips	0%	0%	0%	0%	0%	0%	0%	0%	0%	39%	1%	0%
Vehicle Person Trips	**Daily Work Trips**	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	0%	0%
	Daily Non-Work Trips	0%	0%	0%	0%	0%	0%	0%	0%	0%	41%	1%	0%
Transit Trips	**Daily Work Trips**	1%	0%	0%	0%	0%	0%	2%	0%	0%	8%	1%	0%
	Daily Non-Work Trips	1%	0%	0%	1%	0%	0%	0%	0%	0%	31%	1%	1%

Inbound

		1	2	3	4	5	6	7	8	9	10	11	12	
Drive Alone	**Daily Work Trips**	5,490	1,487	1,743	2,309	986	1,823	858	3,151	-	442,911	26,356	175	
	Daily Non-Work Trips	570	1,140	3,709	1,212	3,456	434	445	7,434	-	#######	19,418	1,472	
Shared Ride 2	**Daily Work Trips**	-	-	648	152	650	717	-	69	-	97,749	7,260	-	
	Daily Non-Work Trips	3,602	672	2,403	4,126	7,267	2,132	3,217	6,085	-	#######	29,009	845	
Shared Ride 3	**Daily Work Trips**	335	-	233	-	-	-	-	-	-	17,610	1,006	-	
	Daily Non-Work Trips	3,266	-	2,310	-	7,318	-	-	4,334	-	844,641	7,244	354	
Taxi	**Daily Work Trips**	-	-	-	815	-	-	-	-	-	3,253	-	140	
	Daily Non-Work Trips	-	-	-	-	394	-	-	-	-	3,387	-	518	
Transit	**Daily Work Trips**	871	2,413	-	-	101	-	2,818	-	-	22,491	1,010	-	
	Daily Non-Work Trips	843	449	-	2,550	739	-	-	-	-	52,723	1,554	1,208	
CHTS Summarized Trips														
Vehicle Drive Trips	**Daily Work Trips**	5,586	1,487	2,134	2,873	1,312	2,182	858	3,185	-	498,765	30,273	258	#######
	Daily Non-Work Trips	3,304	1,476	5,571	3,276	9,416	1,500	2,054	11,715	-	#######	35,992	2,305	#######
Vehicle Person Trips	**Daily Work Trips**	5,826	1,487	2,625	3,275	1,637	2,540	858	3,219	-	561,523	34,622	314	#######
	Daily Non-Work Trips	7,438	1,812	8,422	5,339	18,436	2,565	3,662	17,853	-	#######	55,670	3,188	#######
Vehicle Occupancy	**Daily Work Trips**	1.04	1.00	1.23	1.14	1.25	1.16	1.00	1.01	-	1.13	1.14	1.22	1.52
	Daily Non-Work Trips	2.25	1.23	1.51	1.63	1.96	1.71	1.78	1.52	-	1.64	1.55	1.38	
Transit Trips	**Daily Work Trips**	871	2,413	-	-	101	-	2,818	-	-	22,491	1,010	-	
	Daily Non-Work Trips	843	449	-	2,550	739	-	-	-	-	52,723	1,554	1,208	
CHTS Trip Shares														
Vehicle Drive Trips	**Daily Work Trips**	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	1%	0%	
	Daily Non-Work Trips	0%	0%	0%	0%	0%	0%	0%	0%	0%	37%	1%	0%	
Vehicle Person Trips	**Daily Work Trips**	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	0%	0%	
	Daily Non-Work Trips	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	1%	0%	
Transit Trips	**Daily Work Trips**	1%	1%	0%	0%	0%	0%	2%	0%	0%	13%	1%	0%	
	Daily Non-Work Trips	0%	0%	0%	1%	0%	0%	0%	0%	0%	31%	1%	1%	

Appendix B1: Weekday AM and PM Peak Hour Driveway Counts

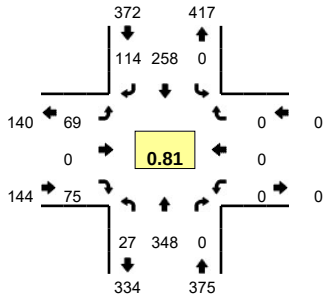
Type of peak hour being reported: System Peak

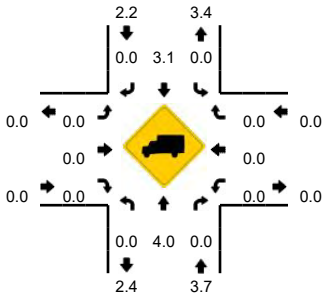
Method for determining peak hour: Total Entering Volume

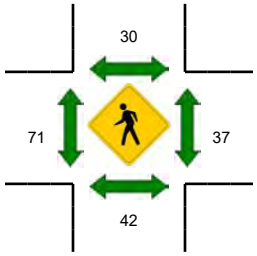
LOCATION: Phelan Ave -- CCSF Lot North Access
CITY/STATE: San Francisco, CA

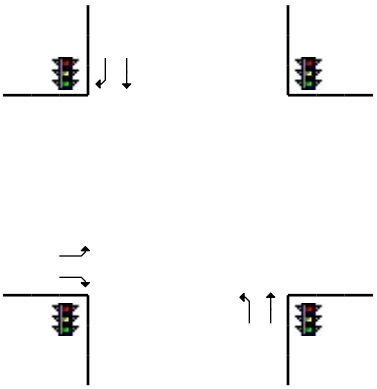
QC JOB #: 14574807
DATE: Thu, Dec 07 2017

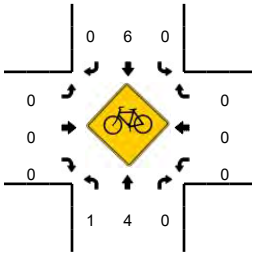
Peak-Hour: 7:35 AM -- 8:35 AM
Peak 15-Min: 7:40 AM -- 7:55 AM

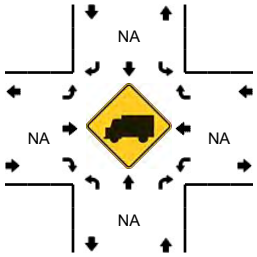


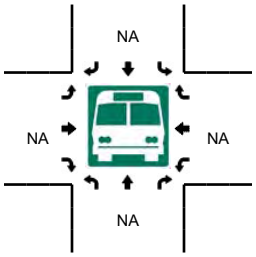












5-Min Count Period Beginning At	Phelan Ave (Northbound)				Phelan Ave (Southbound)				CCSF Lot North Access (Eastbound)				CCSF Lot North Access (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	10	0	0	0	14	0	0	3	0	4	0	0	0	0	0	31	
7:05 AM	2	15	0	0	0	14	1	0	6	0	2	0	0	0	0	0	40	
7:10 AM	0	21	0	0	0	16	1	0	3	0	3	0	0	0	0	0	44	
7:15 AM	1	26	0	0	0	15	1	0	3	0	5	0	0	0	0	0	51	
7:20 AM	0	20	0	0	0	25	0	0	4	0	5	0	0	0	0	0	54	
7:25 AM	0	25	0	0	0	12	2	0	8	0	6	0	0	0	0	0	53	
7:30 AM	2	30	0	0	0	19	1	0	8	0	12	0	0	0	0	0	72	
7:35 AM	3	31	0	1	0	19	4	0	10	0	8	0	0	0	0	0	76	
7:40 AM	3	54	0	0	0	16	3	0	13	0	9	0	0	0	0	0	98	
7:45 AM	3	36	0	0	0	24	7	0	16	0	20	0	0	0	0	0	106	
7:50 AM	1	32	0	0	0	13	9	0	6	0	9	0	0	0	0	0	70	
7:55 AM	2	23	0	0	0	28	12	0	6	0	7	0	0	0	0	0	78	773
8:00 AM	2	30	0	0	0	25	16	0	1	0	1	0	0	0	0	0	75	817
8:05 AM	2	24	0	0	0	29	16	0	4	0	6	0	0	0	0	0	81	858
8:10 AM	4	21	0	0	0	29	11	0	3	0	2	0	0	0	0	0	70	884
8:15 AM	0	21	0	0	0	13	5	0	0	0	6	0	0	0	0	0	45	878
8:20 AM	0	19	0	0	0	29	9	0	3	0	2	0	0	0	0	0	62	886
8:25 AM	3	32	0	0	0	20	11	0	4	0	3	0	0	0	0	0	73	906
8:30 AM	3	25	0	0	0	13	11	0	3	0	2	0	0	0	0	0	57	891
8:35 AM	1	27	0	0	0	19	9	0	4	0	5	0	0	0	0	0	65	880
8:40 AM	1	24	0	0	0	29	19	0	6	0	3	0	0	0	0	0	82	864
8:45 AM	5	25	0	0	0	30	17	0	7	0	1	0	0	0	0	0	85	843
8:50 AM	1	20	0	0	0	23	9	0	8	0	7	0	0	0	0	0	68	841
8:55 AM	1	12	0	0	0	30	19	0	6	0	7	0	0	0	0	0	75	838

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	28	488	0	0	0	212	76	0	140	0	152	0	0	0	0	0	1096
Heavy Trucks	0	8	0		0	8	0		0	0	0		0	0	0		16
Pedestrians		44				36				80				24			184
Bicycles	0	0	0		0	2	0		0	0	0		0	0	0		2
Railroad																	
Stopped Buses																	

Comments:

Report generated on 12/18/2017 2:27 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

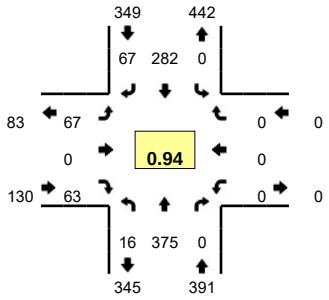
Type of peak hour being reported: System Peak

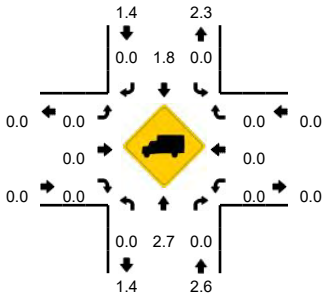
Method for determining peak hour: Total Entering Volume

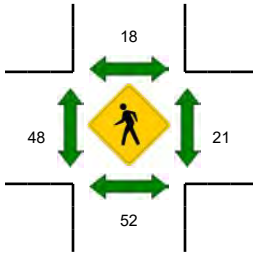
LOCATION: Phelan Ave -- CCSF Lot North Access
CITY/STATE: San Francisco, CA

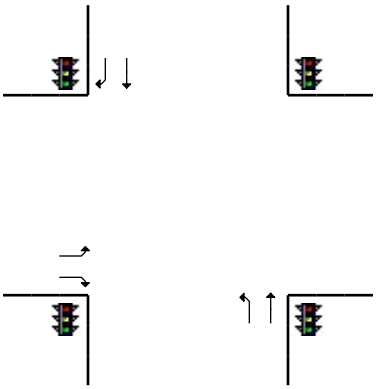
QC JOB #: 14574808
DATE: Thu, Dec 07 2017

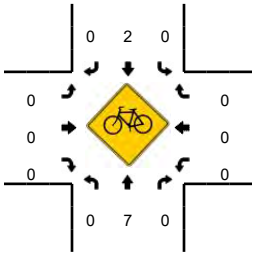
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:25 PM -- 5:40 PM

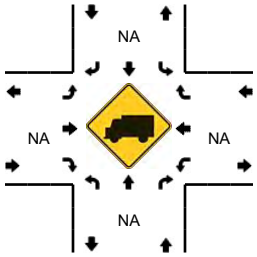


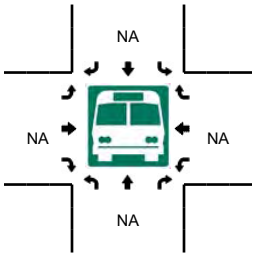












5-Min Count Period Beginning At	Phelan Ave (Northbound)				Phelan Ave (Southbound)				CCSF Lot North Access (Eastbound)				CCSF Lot North Access (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	1	26	0	0	0	17	0	0	4	0	10	0	0	0	0	0	58	
4:05 PM	0	30	0	0	0	19	2	0	5	0	3	0	0	0	0	0	59	
4:10 PM	2	29	0	0	0	19	4	0	16	0	10	0	0	0	0	0	80	
4:15 PM	0	36	0	0	0	18	5	0	10	0	6	0	0	0	0	0	75	
4:20 PM	1	22	0	0	0	18	2	0	7	0	7	0	0	0	0	0	57	
4:25 PM	2	33	0	0	0	20	2	0	3	0	10	0	0	0	0	0	70	
4:30 PM	0	22	0	0	0	19	1	0	7	0	4	0	0	0	0	0	53	
4:35 PM	1	34	0	0	0	18	2	0	4	0	7	0	0	0	0	0	66	
4:40 PM	1	26	0	0	0	16	1	0	13	0	2	0	0	0	0	0	59	
4:45 PM	1	28	0	0	0	18	3	0	5	0	6	0	0	0	0	0	61	
4:50 PM	3	17	0	0	0	23	0	0	7	0	5	0	0	0	0	0	55	
4:55 PM	2	42	0	0	0	12	0	0	7	0	11	0	0	0	0	0	74	767
5:00 PM	1	28	0	0	0	26	2	0	5	0	5	0	0	0	0	0	67	776
5:05 PM	2	35	0	0	0	17	3	0	5	0	12	0	0	0	0	0	74	791
5:10 PM	1	24	0	0	0	25	4	0	9	0	5	0	0	0	0	0	68	779
5:15 PM	1	34	0	0	0	22	6	0	6	0	4	0	0	0	0	0	73	777
5:20 PM	1	34	0	0	0	25	4	0	6	0	6	0	0	0	0	0	76	796
5:25 PM	1	38	0	0	0	22	3	0	7	0	8	0	0	0	0	0	79	805
5:30 PM	1	35	0	0	0	20	5	0	8	0	5	0	0	0	0	0	74	826
5:35 PM	3	34	0	0	0	33	4	0	1	0	4	0	0	0	0	0	79	839
5:40 PM	0	31	0	0	0	21	4	0	3	0	6	0	0	0	0	0	65	845
5:45 PM	0	19	0	0	0	23	10	0	6	0	3	0	0	0	0	0	61	845
5:50 PM	3	31	0	0	0	22	11	0	5	0	3	0	0	0	0	0	75	865
5:55 PM	2	32	0	0	0	26	11	0	6	0	2	0	0	0	0	0	79	870

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	20	428	0	0	0	300	48	0	64	0	68	0	0	0	0	0	928
Heavy Trucks	0	8	0		0	0	0		0	0	0		0	0	0		8
Pedestrians		28				16				56				8			108
Bicycles	0	0	0		0	1	0		0	0	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 12/18/2017 2:28 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

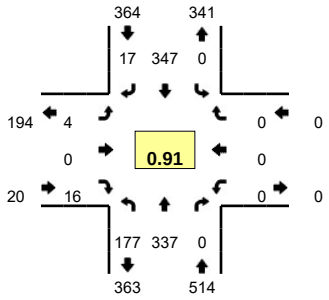
Type of peak hour being reported: System Peak

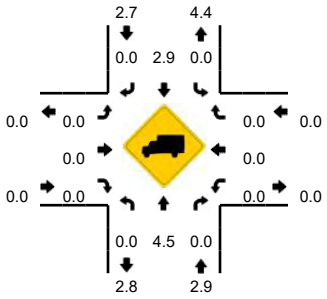
Method for determining peak hour: Total Entering Volume

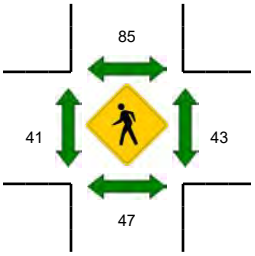
LOCATION: Phelan Ave -- CCSF Lot Central
CITY/STATE: San Francisco, CA

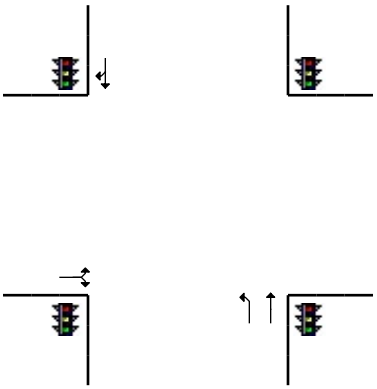
QC JOB #: 14574811
DATE: Thu, Dec 07 2017

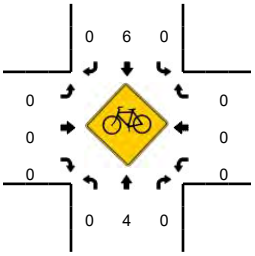
Peak-Hour: 7:35 AM -- 8:35 AM
Peak 15-Min: 7:40 AM -- 7:55 AM

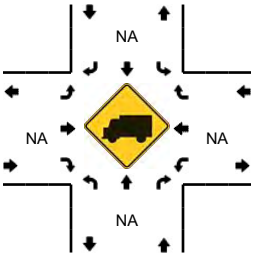


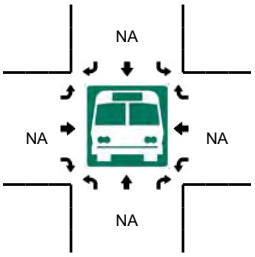












5-Min Count Period Beginning At	Phelan Ave (Northbound)				Phelan Ave (Southbound)				CCSF Lot Central (Eastbound)				CCSF Lot Central (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	4	11	0	0	0	17	0	0	0	0	1	0	0	0	0	0	33	
7:05 AM	8	17	0	0	0	17	1	0	0	0	2	0	0	0	0	0	45	
7:10 AM	4	21	0	0	0	19	0	0	0	0	0	0	0	0	0	0	44	
7:15 AM	7	26	0	0	0	24	0	0	0	0	0	0	0	0	0	0	57	
7:20 AM	3	16	0	0	0	24	0	0	1	0	1	0	0	0	0	0	45	
7:25 AM	9	32	0	0	0	21	0	0	0	0	2	0	0	0	0	0	64	
7:30 AM	9	30	0	0	0	33	0	0	1	0	3	0	0	0	0	0	76	
7:35 AM	11	34	0	0	0	29	0	0	0	0	2	0	0	0	0	0	76	
7:40 AM	8	55	0	0	0	26	0	0	1	0	4	0	0	0	0	0	94	
7:45 AM	15	26	0	0	0	32	1	0	0	0	0	0	0	0	0	0	74	
7:50 AM	14	33	0	0	0	32	0	0	0	0	1	0	0	0	0	0	80	
7:55 AM	13	22	0	0	0	31	2	0	2	0	0	0	0	0	0	0	70	758
8:00 AM	18	21	0	0	0	33	2	0	0	0	3	0	0	0	0	0	77	802
8:05 AM	23	20	0	0	0	32	4	0	0	0	2	0	0	0	0	0	81	838
8:10 AM	18	23	0	0	0	39	2	0	0	0	0	0	0	0	0	0	82	876
8:15 AM	17	20	0	0	0	27	0	0	0	0	2	0	0	0	0	0	66	885
8:20 AM	12	24	0	0	0	22	1	0	1	0	0	0	0	0	0	0	60	900
8:25 AM	18	27	0	0	0	29	2	0	0	0	0	0	0	0	0	0	76	912
8:30 AM	10	32	0	0	0	15	3	0	0	0	2	0	0	0	0	0	62	898
8:35 AM	13	20	0	0	0	30	2	0	0	0	2	0	0	0	0	0	67	889
8:40 AM	28	19	0	0	0	26	2	0	2	0	3	0	0	0	0	0	80	875
8:45 AM	16	28	0	0	0	35	4	0	1	0	2	0	0	0	0	0	86	887
8:50 AM	21	16	0	0	0	30	2	0	0	0	0	0	0	0	0	0	69	876
8:55 AM	29	14	0	0	0	34	2	0	0	0	4	0	0	0	0	0	83	889

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	148	456	0	0	0	360	4	0	4	0	20	0	0	0	0	0	992
Heavy Trucks	0	16	0		0	8	0		0	0	0		0	0	0		24
Pedestrians		48				56				36				40			180
Bicycles	0	0	0		0	1	0		0	0	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 12/18/2017 2:27 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

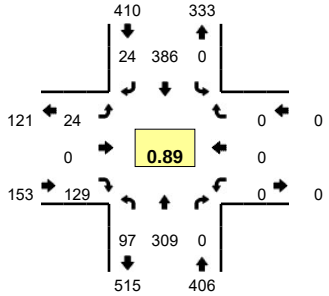
Type of peak hour being reported: System Peak

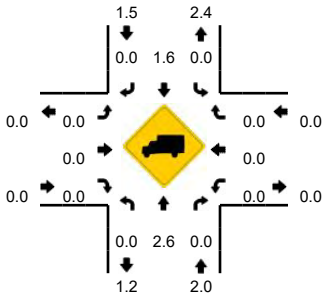
Method for determining peak hour: Total Entering Volume

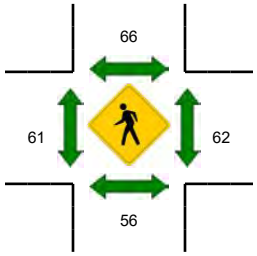
LOCATION: Phelan Ave -- CCSF Lot Central
CITY/STATE: San Francisco, CA

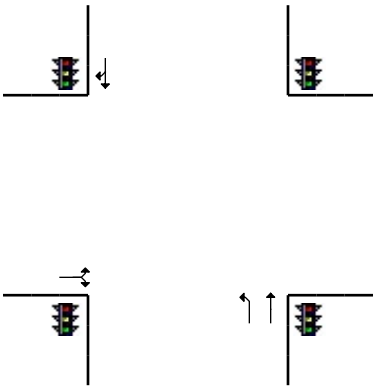
QC JOB #: 14574812
DATE: Thu, Dec 07 2017

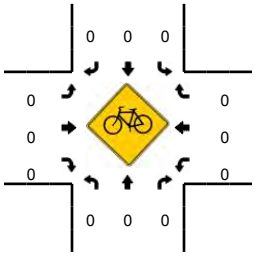
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:25 PM -- 5:40 PM

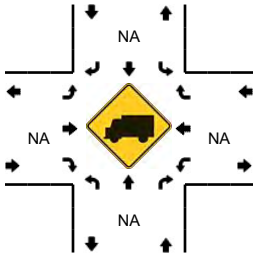


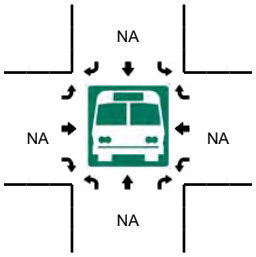












5-Min Count Period Beginning At	Phelan Ave (Northbound)				Phelan Ave (Southbound)				CCSF Lot Central (Eastbound)				CCSF Lot Central (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	4	22	0	0	0	28	1	0	3	0	12	0	0	0	0	0	70	
4:05 PM	12	24	0	0	0	31	0	0	2	0	20	0	0	0	0	0	89	
4:10 PM	4	28	0	0	0	39	0	0	1	0	18	0	0	0	0	0	90	
4:15 PM	2	26	0	0	0	30	1	0	0	0	13	0	0	0	0	0	72	
4:20 PM	4	22	0	0	0	30	0	0	2	0	10	0	0	0	0	0	68	
4:25 PM	8	20	0	0	0	29	0	0	0	0	10	0	0	0	0	0	67	
4:30 PM	4	29	0	0	0	29	2	0	1	0	7	0	0	0	0	0	72	
4:35 PM	6	27	0	0	0	37	0	0	0	0	13	0	0	0	0	0	83	
4:40 PM	4	26	0	0	0	28	1	0	1	0	9	0	0	0	0	0	69	
4:45 PM	5	16	0	0	0	25	1	0	4	0	5	0	0	0	0	0	56	
4:50 PM	4	23	0	0	0	31	3	0	1	0	10	0	0	0	0	0	72	
4:55 PM	10	33	0	0	0	30	2	0	2	0	13	0	0	0	0	0	90	898
5:00 PM	8	24	0	0	0	33	0	0	2	0	13	0	0	0	0	0	80	908
5:05 PM	5	24	0	0	0	34	2	0	1	0	18	0	0	0	0	0	84	903
5:10 PM	3	24	0	0	0	43	2	0	1	0	16	0	0	0	0	0	89	902
5:15 PM	9	25	0	0	0	36	2	0	2	0	8	0	0	0	0	0	82	912
5:20 PM	11	28	0	0	0	24	2	0	1	0	16	0	0	0	0	0	82	926
5:25 PM	7	31	0	0	0	27	1	0	3	0	18	0	0	0	0	0	87	946
5:30 PM	11	25	0	0	0	29	3	0	3	0	14	0	0	0	0	0	85	959
5:35 PM	6	33	0	0	0	48	1	0	4	0	7	0	0	0	0	0	99	975
5:40 PM	6	23	0	0	0	23	2	0	3	0	6	0	0	0	0	0	63	969
5:45 PM	10	15	0	0	0	30	1	0	2	0	6	0	0	0	0	0	64	977
5:50 PM	7	34	0	0	0	27	6	0	2	0	1	0	0	0	0	0	77	982
5:55 PM	14	23	0	0	0	32	2	0	0	0	6	0	0	0	0	0	77	969

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	96	356	0	0	0	416	20	0	40	0	156	0	0	0	0	0	1084
Heavy Trucks	0	12	0		0	0	0		0	0	0		0	0	0		12
Pedestrians		28				40				72				44			184
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 12/18/2017 2:28 PM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Appendix B2: Hourly Parking Utilization Counts

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

2455 Bates Ave, Suite C
Concord, CA 94529
Ph: 925-587-5026

Date Counted: 12/7/2017
Location: Lower Lot

	North Zone				
	Count				
Time	Red - 122	Orange - 156	Yellow - 156	Green - 131	Total
7:00 AM	0	0	0	0	0
8:00 AM	0	0	1	0	1
9:00 AM	0	0	1	5	6
10:00 AM	12	16	18	43	89
11:00 AM	30	37	22	80	169
12:00 PM	34	42	25	84	185
1:00 PM	19	24	15	57	115
2:00 PM	7	14	7	31	59
3:00 PM	3	11	7	29	50
4:00 PM	2	3	4	11	20
5:00 PM	1	2	4	7	14
6:00 PM	0	0	1	4	5
7:00 PM	0	0	1	1	2
8:00 PM	0	0	0	0	0
9:00 PM	0	0	0	0	0
SUPPLY	122	156	156	131	565

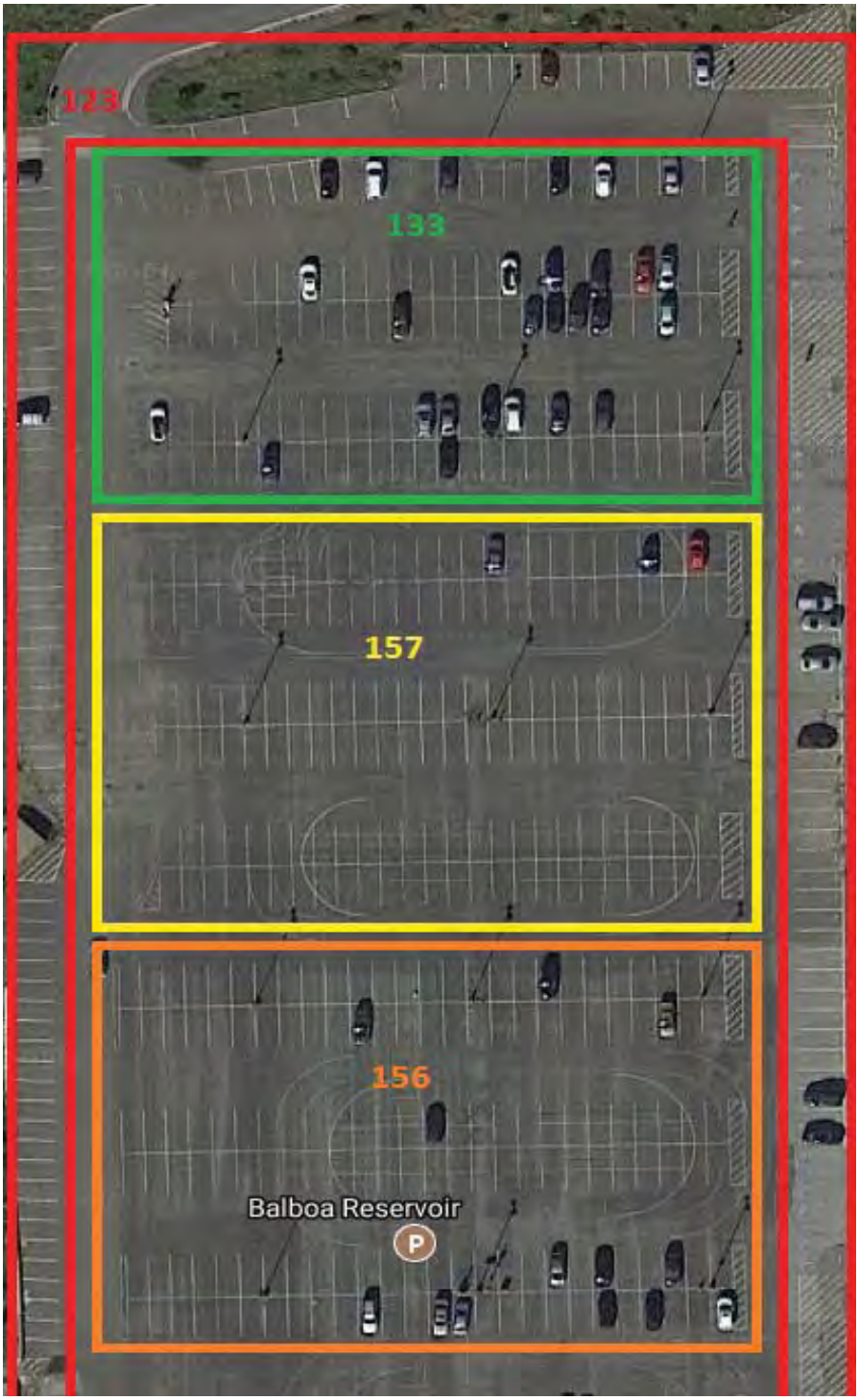
	North Zone				
	Utilization				
Time	Red - 122	Orange - 156	Yellow - 156	Green - 131	Average
7:00 AM	0%	0%	0%	0%	0%
8:00 AM	0%	0%	1%	0%	0%
9:00 AM	0%	0%	1%	4%	1%
10:00 AM	10%	10%	12%	33%	16%
11:00 AM	25%	24%	14%	61%	31%
12:00 PM	28%	27%	16%	64%	34%
1:00 PM	16%	15%	10%	44%	21%
2:00 PM	6%	9%	4%	24%	11%
3:00 PM	2%	7%	4%	22%	9%
4:00 PM	2%	2%	3%	8%	4%
5:00 PM	1%	1%	3%	5%	3%
6:00 PM	0%	0%	1%	3%	1%
7:00 PM	0%	0%	1%	1%	0%
8:00 PM	0%	0%	0%	0%	0%
9:00 PM	0%	0%	0%	0%	0%
AVG. OCCUPANCY	6%	6%	5%	18%	9%

	South Zone			
	Count			
Time	Red - 89	Orange - 197	Green - 156	Total
7:00 AM	0	0	0	0
8:00 AM	2	0	0	2
9:00 AM	5	0	0	5
10:00 AM	15	4	25	44
11:00 AM	28	12	26	66
12:00 PM	27	12	29	68
1:00 PM	25	9	18	52
2:00 PM	26	5	11	42
3:00 PM	24	4	9	37
4:00 PM	9	8	3	20
5:00 PM	7	3	2	12
6:00 PM	2	2	0	4
7:00 PM	3	1	0	4
8:00 PM	1	0	1	2
9:00 PM	1	0	0	1
SUPPLY	89	197	156	442

	South Zone			
	Utilization			
Time	Red - 89	Orange - 197	Green - 156	Average
7:00 AM	0%	0%	0%	0%
8:00 AM	2%	0%	0%	1%
9:00 AM	6%	0%	0%	2%
10:00 AM	17%	2%	16%	12%
11:00 AM	31%	6%	17%	18%
12:00 PM	30%	6%	19%	18%
1:00 PM	28%	5%	12%	15%
2:00 PM	29%	3%	7%	13%
3:00 PM	27%	2%	6%	12%
4:00 PM	10%	4%	2%	5%
5:00 PM	8%	2%	1%	4%
6:00 PM	2%	1%	0%	1%
7:00 PM	3%	1%	0%	1%
8:00 PM	1%	0%	1%	1%
9:00 PM	1%	0%	0%	0%
AVG. OCCUPANCY	13%	2%	5%	7%

	Lower Lot	
Time	Occupied Space	Utilization
7:00 AM	0	0%
8:00 AM	3	0%
9:00 AM	11	1%
10:00 AM	133	13%
11:00 AM	235	23%
12:00 PM	253	25%
1:00 PM	167	17%
2:00 PM	101	10%
3:00 PM	87	9%
4:00 PM	40	4%
5:00 PM	26	3%
6:00 PM	9	1%
7:00 PM	6	1%
8:00 PM	2	0%
9:00 PM	1	0%
SUPPLY / AVG. OCCUPANCY	1007	7%

North Zone

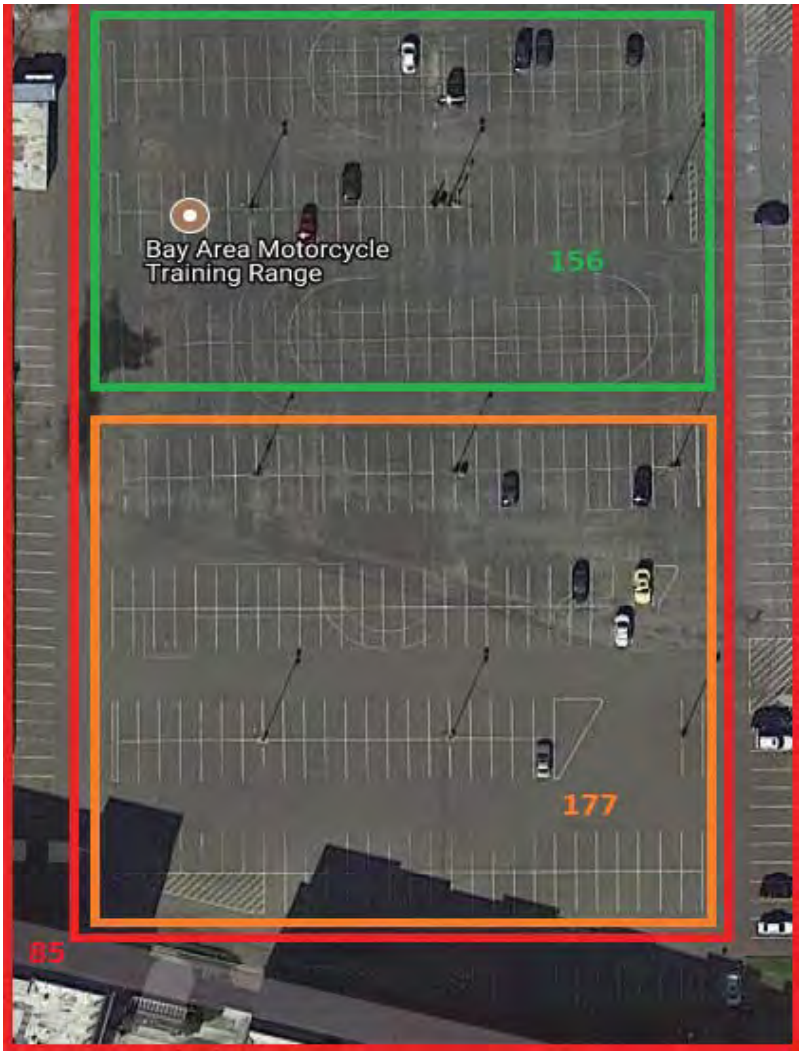


Zone	Overhead	On Site
Red	123	122
Orange	156	156
Yellow	157	156
Green	133	131

Notes:
"overhead" and "onsite" refers to the method used to count parking supply/inventory

* Aerial photo used for definition of sub areas for data collection. Aerial photos were not used for parking counts.

South Zone



Zone	Overhead	On Site
Red	85	89
Orange	177	197
Green	156	156

Notes:
"overhead" and "onsite" refers to the method used to count parking supply/inventory

* Aerial photo used for definition of sub areas for data collection. Aerial photos were not used for parking counts.

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES
2455 Bates Ave, Suite C
Concord, CA 94529
Ph: 925-587-5026

Date Counted: 12/7/2017
Location: Upper Lot

	North Zone				
	Count				
Time	Red - 176	Orange - 135	Yellow - 263	Green - 198	Total
7:00 AM	6	15	3	4	28
8:00 AM	33	47	20	41	141
9:00 AM	94	116	112	133	455
10:00 AM	175	135	263	198	771
11:00 AM	172	130	256	195	753
12:00 PM	174	135	258	192	759
1:00 PM	168	129	243	186	726
2:00 PM	138	93	180	156	567
3:00 PM	117	72	163	131	483
4:00 PM	91	64	64	87	306
5:00 PM	71	63	44	60	238
6:00 PM	96	88	49	74	307
7:00 PM	112	113	68	108	401
8:00 PM	91	87	55	103	336
9:00 PM	44	32	22	50	148
SUPPLY	176	135	263	198	772

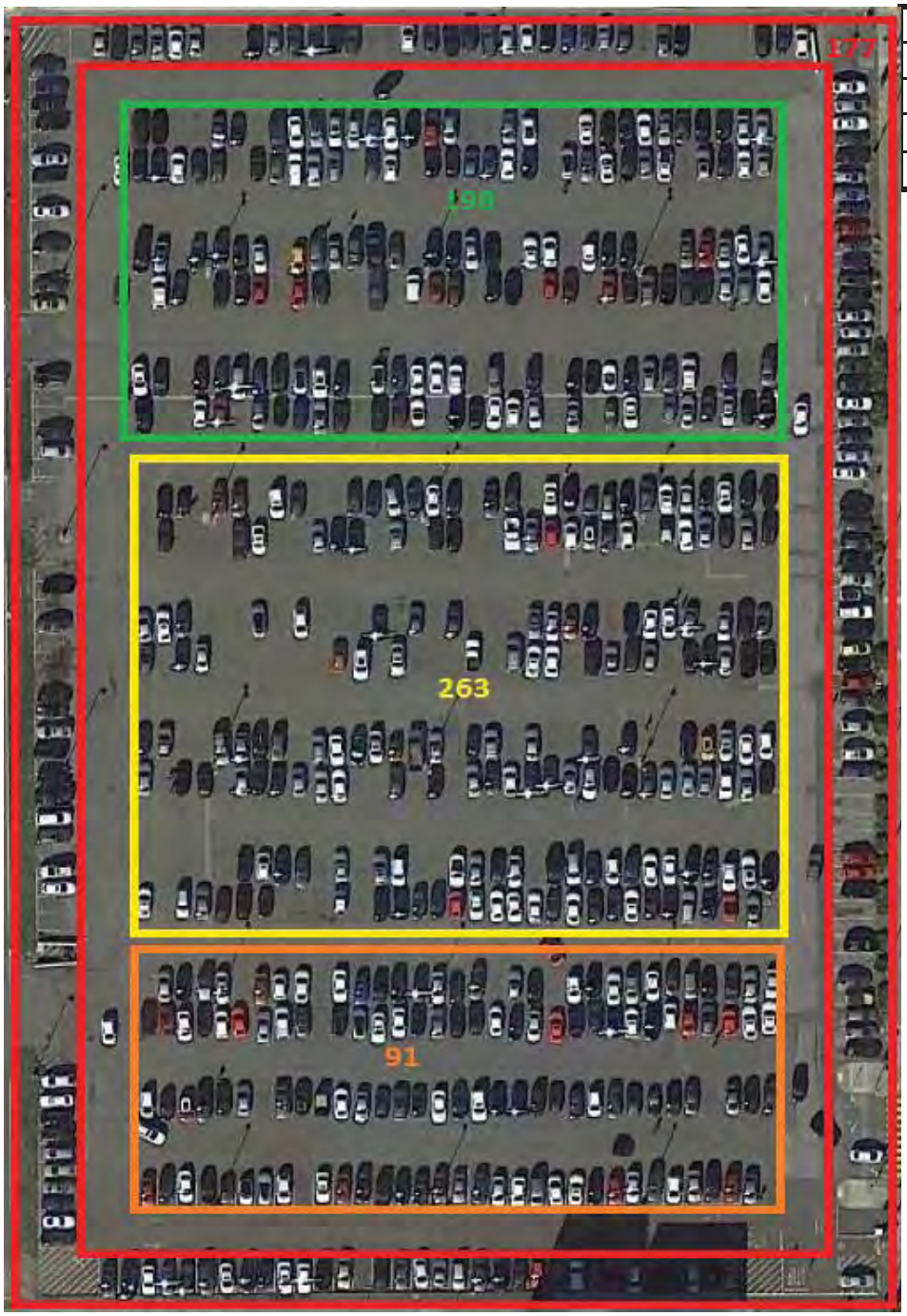
	North Zone				
	Utilization				
Time	Red - 176	Orange - 135	Yellow - 263	Green - 198	Average
7:00 AM	3%	11%	1%	2%	4%
8:00 AM	19%	35%	8%	21%	20%
9:00 AM	53%	86%	43%	67%	62%
10:00 AM	99%	100%	100%	100%	100%
11:00 AM	98%	96%	97%	98%	97%
12:00 PM	99%	100%	98%	97%	98%
1:00 PM	95%	96%	92%	94%	94%
2:00 PM	78%	69%	68%	79%	74%
3:00 PM	66%	53%	62%	66%	62%
4:00 PM	52%	47%	24%	44%	42%
5:00 PM	40%	47%	17%	30%	34%
6:00 PM	55%	65%	19%	37%	44%
7:00 PM	64%	84%	26%	55%	57%
8:00 PM	52%	64%	21%	52%	47%
9:00 PM	25%	24%	8%	25%	21%
AVG. OCCUPANCY	60%	65%	46%	58%	57%

	South Zone			
	Count			
Time	Red - 69	Orange - 242	Green - 84	Total
7:00 AM	3	5	3	11
8:00 AM	8	22	10	40
9:00 AM	26	90	43	159
10:00 AM	32	208	67	307
11:00 AM	39	208	71	318
12:00 PM	47	202	75	324
1:00 PM	53	202	77	332
2:00 PM	27	156	63	246
3:00 PM	46	105	59	210
4:00 PM	41	71	58	170
5:00 PM	30	45	48	123
6:00 PM	17	62	43	122
7:00 PM	15	67	54	136
8:00 PM	12	52	45	109
9:00 PM	8	18	10	36
SUPPLY	69	242	84	395

	South Zone			
	Utilization			
Time	Red - 69	Orange - 242	Green - 84	Average
7:00 AM	4%	2%	4%	3%
8:00 AM	12%	9%	12%	11%
9:00 AM	38%	37%	51%	42%
10:00 AM	46%	86%	80%	71%
11:00 AM	57%	86%	85%	76%
12:00 PM	68%	83%	89%	80%
1:00 PM	77%	83%	92%	84%
2:00 PM	39%	64%	75%	60%
3:00 PM	67%	43%	70%	60%
4:00 PM	59%	29%	69%	53%
5:00 PM	43%	19%	57%	40%
6:00 PM	25%	26%	51%	34%
7:00 PM	22%	28%	64%	38%
8:00 PM	17%	21%	54%	31%
9:00 PM	12%	7%	12%	10%
AVG. OCCUPANCY	39%	42%	58%	46%

	Upper Lot	
Time	Count - 1167	Utilization
7:00 AM	39	3%
8:00 AM	181	16%
9:00 AM	614	53%
10:00 AM	1078	92%
11:00 AM	1071	92%
12:00 PM	1083	93%
1:00 PM	1058	91%
2:00 PM	813	70%
3:00 PM	693	59%
4:00 PM	476	41%
5:00 PM	361	31%
6:00 PM	429	37%
7:00 PM	537	46%
8:00 PM	445	38%
9:00 PM	184	16%
SUPPLY/AVG. OCCUPANCY	1167	52%

North Zone

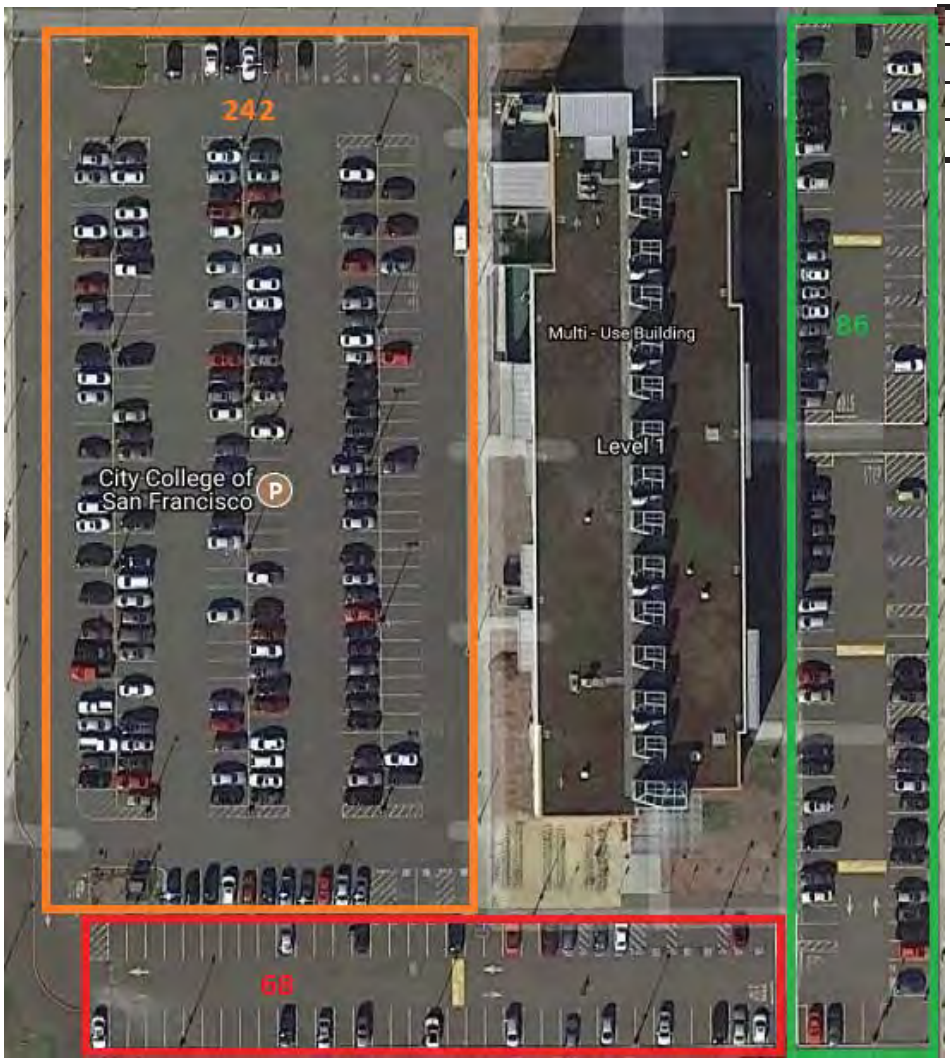


Zone	Overhead	On Site
Red	177	176
Orange	91	135
Yellow	263	236
Green	198	198

Notes:
"overhead" and "onsite" refers to the method used to count parking supply/inventory

* Aerial photo used for definition of sub areas for data collection. Aerial photos were not used for parking counts.

South Zone



Zone	Overhead	On Site
Red	68	69
Orange	242	242
Green	86	84

Notes:
"overhead" and "onsite" refers to the method used to count parking supply/inventory

* Aerial photo used for definition of sub areas for data collection. Aerial photos were not used for parking counts.

Wednesday, January 31, 2018

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

2455 Bates Ave, Suite C
Concord, CA 94529
Ph: 925-587-5026

Date Counted: 1/31/2018
Location: Lower Lot

	North Zone				
	Count				
Time	Red - 122	Orange - 156	Yellow - 156	Green - 131	Total
7:00 AM	0	0	1	0	1
8:00 AM	2	0	1	0	3
9:00 AM	7	7	2	4	20
10:00 AM	57	26	64	124	271
11:00 AM	73	88	106	125	392
12:00 PM	45	97	106	105	353
1:00 PM	30	55	57	73	215
2:00 PM	18	31	33	49	131
3:00 PM	14	25	21	31	91
4:00 PM	7	13	11	18	49
5:00 PM	7	2	8	12	29
6:00 PM	0	0	2	2	4
7:00 PM	2	0	3	2	7
8:00 PM	1	0	2	2	5
9:00 PM	0	0	2	1	3
SUPPLY	122	156	156	131	565

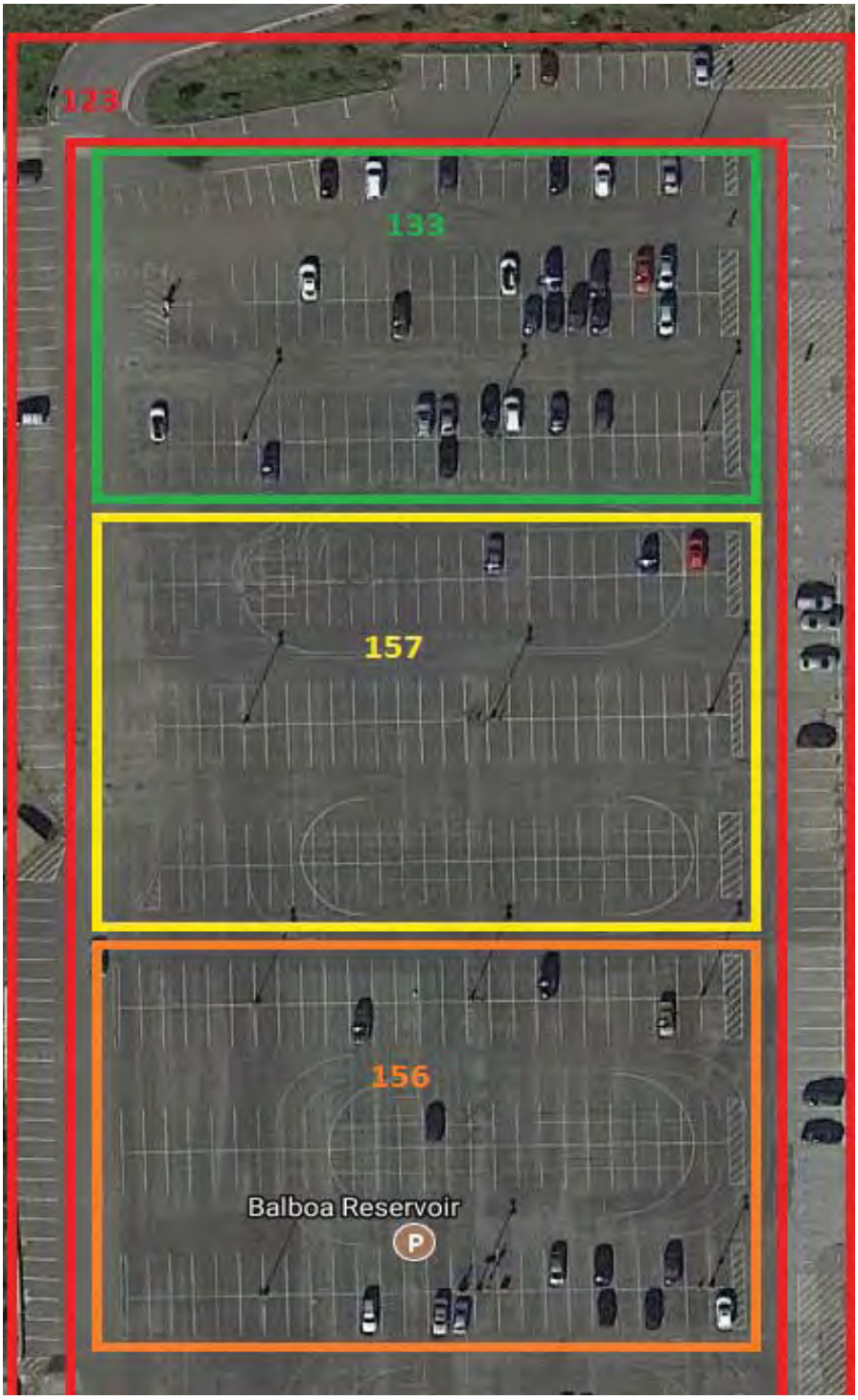
	North Zone				
	Utilization				
Time	Red - 122	Orange - 156	Yellow - 156	Green - 131	Average
7:00 AM	0%	0%	1%	0%	0%
8:00 AM	2%	0%	1%	0%	1%
9:00 AM	6%	4%	1%	3%	4%
10:00 AM	47%	17%	41%	95%	50%
11:00 AM	60%	56%	68%	95%	70%
12:00 PM	37%	62%	68%	80%	62%
1:00 PM	25%	35%	37%	56%	38%
2:00 PM	15%	20%	21%	37%	23%
3:00 PM	11%	16%	13%	24%	16%
4:00 PM	6%	8%	7%	14%	9%
5:00 PM	6%	1%	5%	9%	5%
6:00 PM	0%	0%	1%	2%	1%
7:00 PM	2%	0%	2%	2%	1%
8:00 PM	1%	0%	1%	2%	1%
9:00 PM	0%	0%	1%	1%	1%
AVG. OCCUPANCY	14%	15%	18%	28%	19%

	South Zone			
	Count			
Time	Red - 89	Orange - 197	Green - 156	Total
7:00 AM	0	0	0	0
8:00 AM	1	0	0	1
9:00 AM	35	19	65	119
10:00 AM	39	30	67	136
11:00 AM	42	36	63	141
12:00 PM	38	35	57	130
1:00 PM	25	27	30	82
2:00 PM	21	16	18	55
3:00 PM	17	14	13	44
4:00 PM	9	12	6	27
5:00 PM	8	9	9	26
6:00 PM	2	5	6	13
7:00 PM	2	1	2	5
8:00 PM	1	0	2	3
9:00 PM	0	0	1	1
SUPPLY	89	197	156	442

	South Zone			
	Utilization			
Time	Red - 89	Orange - 197	Green - 156	Average
7:00 AM	0%	0%	0%	0%
8:00 AM	1%	0%	0%	0%
9:00 AM	39%	10%	42%	30%
10:00 AM	44%	15%	43%	34%
11:00 AM	47%	18%	40%	35%
12:00 PM	43%	18%	37%	32%
1:00 PM	28%	14%	19%	20%
2:00 PM	24%	8%	12%	14%
3:00 PM	19%	7%	8%	12%
4:00 PM	10%	6%	4%	7%
5:00 PM	9%	5%	6%	6%
6:00 PM	2%	3%	4%	3%
7:00 PM	2%	1%	1%	1%
8:00 PM	1%	0%	1%	1%
9:00 PM	0%	0%	1%	0%
AVG. OCCUPANCY	18%	7%	14%	13%

	Lower Lot	
Time	Count - 1007	Utilization
7:00 AM	1	0%
8:00 AM	4	0%
9:00 AM	139	14%
10:00 AM	407	40%
11:00 AM	533	53%
12:00 PM	483	48%
1:00 PM	297	29%
2:00 PM	186	18%
3:00 PM	135	13%
4:00 PM	76	8%
5:00 PM	55	5%
6:00 PM	17	2%
7:00 PM	12	1%
8:00 PM	8	1%
9:00 PM	4	0%
SUPPLY/AVG. OCCUPANCY	1007	16%

North Zone

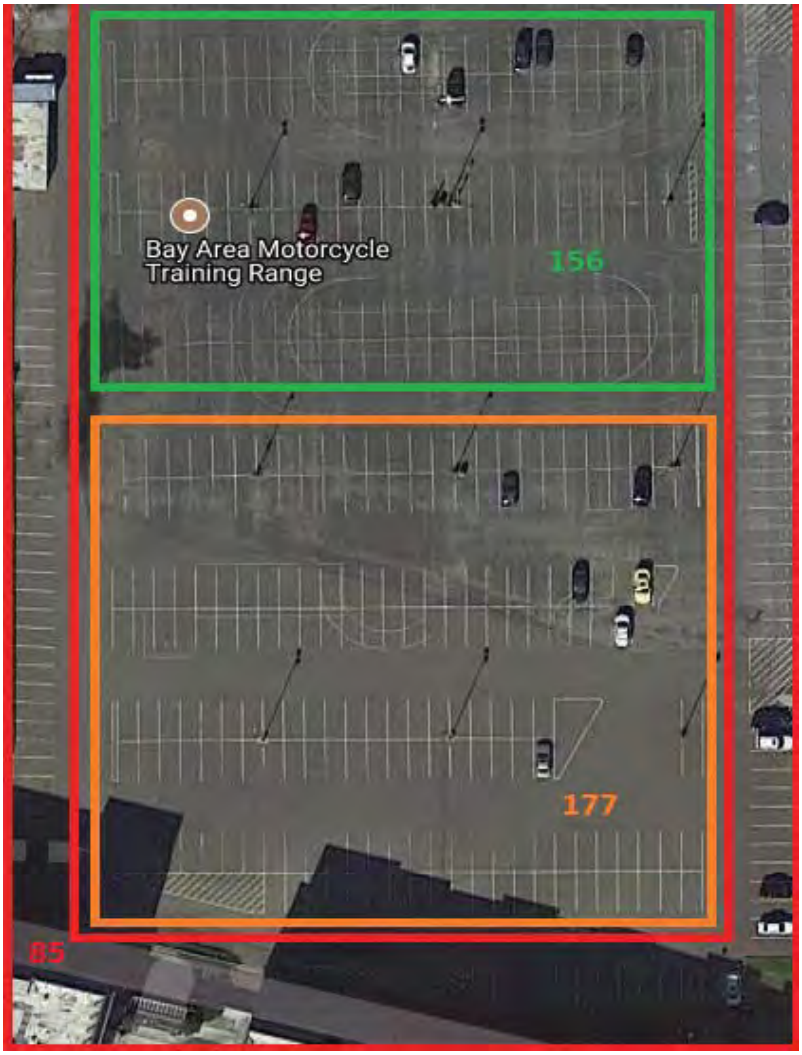


Zone	Overhead	On Site
Red	123	122
Orange	156	156
Yellow	157	156
Green	133	131

Notes:
"overhead" and "onsite" refers to the method used to count parking supply/inventory

* Aerial photo used for definition of sub areas for data collection. Aerial photos were not used for parking counts.

South Zone



Zone	Overhead	On Site
Red	85	89
Orange	177	197
Green	156	156

Notes:
"overhead" and "onsite" refers to the method used to count parking supply/inventory

* Aerial photo used for definition of sub areas for data collection. Aerial photos were not used for parking counts.

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES
2455 Bates Ave, Suite C
Concord, CA 94529
Ph: 925-587-5026

Date Counted: 1/31/2018
Location: Upper Lot

	North Zone				
	Count				
Time	Red - 176	Orange - 135	Yellow - 263	Green - 198	Total
7:00 AM	17	32	7	5	61
8:00 AM	47	95	46	59	247
9:00 AM	170	135	257	198	760
10:00 AM	176	134	263	197	770
11:00 AM	167	129	251	186	733
12:00 PM	167	129	252	198	746
1:00 PM	154	112	220	198	684
2:00 PM	133	121	170	198	622
3:00 PM	119	112	176	118	525
4:00 PM	101	84	99	87	371
5:00 PM	97	102	88	65	352
6:00 PM	102	124	130	113	469
7:00 PM	127	133	147	174	581
8:00 PM	108	99	140	152	499
9:00 PM	48	37	46	63	194
SUPPLY	176	135	263	198	772

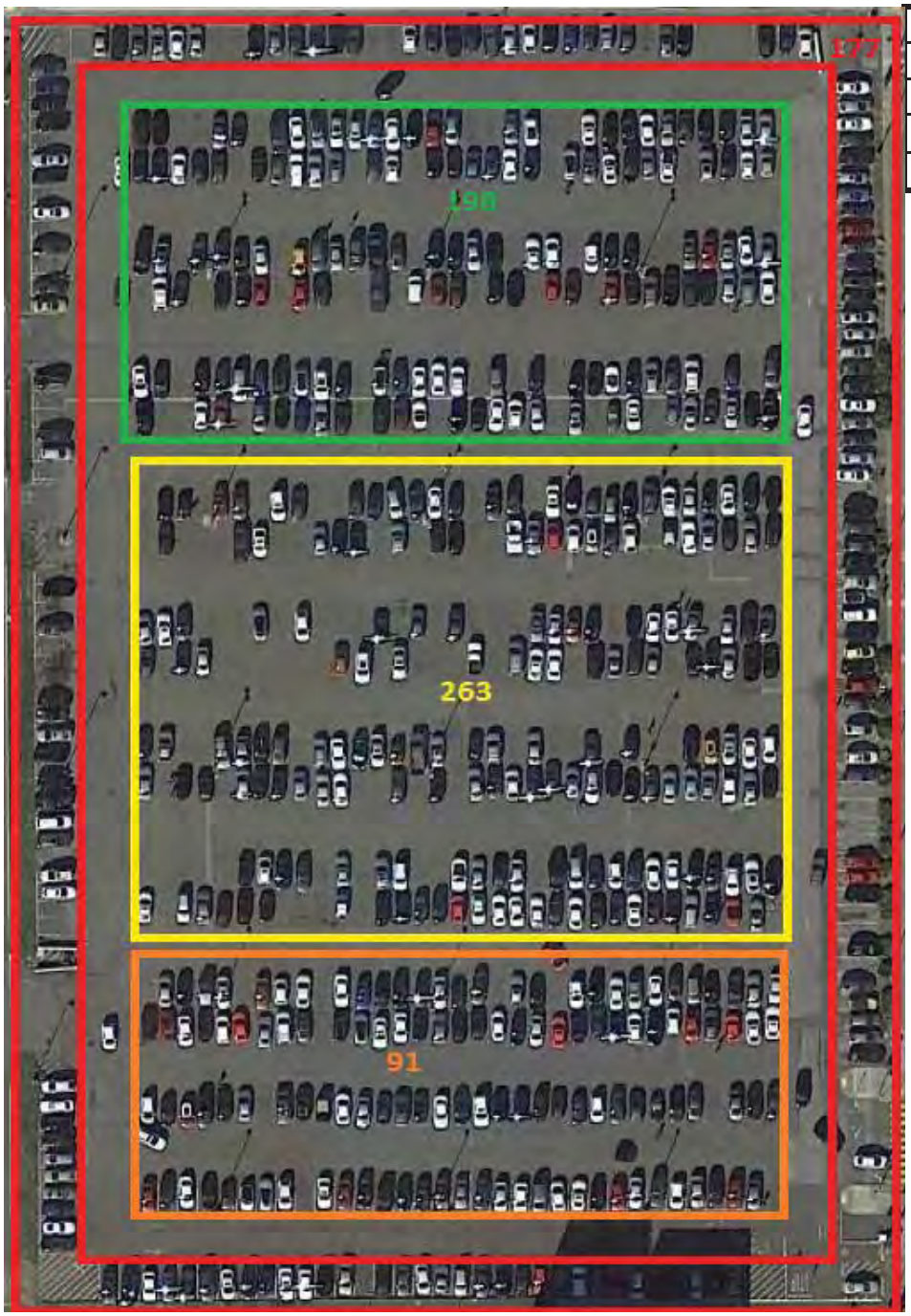
	North Zone				
	Utilization				
Time	Red - 176	Orange - 135	Yellow - 263	Green - 198	Average
7:00 AM	10%	24%	3%	3%	10%
8:00 AM	27%	70%	17%	30%	36%
9:00 AM	97%	100%	98%	100%	99%
10:00 AM	100%	99%	100%	99%	100%
11:00 AM	95%	96%	95%	94%	95%
12:00 PM	95%	96%	96%	100%	97%
1:00 PM	88%	83%	84%	100%	89%
2:00 PM	76%	90%	65%	100%	82%
3:00 PM	68%	83%	67%	60%	69%
4:00 PM	57%	62%	38%	44%	50%
5:00 PM	55%	76%	33%	33%	49%
6:00 PM	58%	92%	49%	57%	64%
7:00 PM	72%	99%	56%	88%	79%
8:00 PM	61%	73%	53%	77%	66%
9:00 PM	27%	27%	17%	32%	26%
AVG. OCCUPANCY	66%	78%	58%	68%	67%

	South Zone			
	Count			
Time	Red - 69	Orange - 242	Green - 84	Total
7:00 AM	2	13	3	18
8:00 AM	7	28	16	51
9:00 AM	14	137	47	198
10:00 AM	32	216	76	324
11:00 AM	44	210	76	330
12:00 PM	51	177	72	300
1:00 PM	46	162	71	279
2:00 PM	48	139	67	254
3:00 PM	44	95	62	201
4:00 PM	38	93	53	184
5:00 PM	29	57	44	130
6:00 PM	34	68	50	152
7:00 PM	31	63	70	164
8:00 PM	15	45	53	113
9:00 PM	6	25	26	57
SUPPLY	69	242	84	395

	South Zone			
	Utilization			
Time	Red - 69	Orange - 242	Green - 84	Average
7:00 AM	3%	5%	4%	4%
8:00 AM	10%	12%	19%	14%
9:00 AM	20%	57%	56%	44%
10:00 AM	46%	89%	90%	75%
11:00 AM	64%	87%	90%	80%
12:00 PM	74%	73%	86%	78%
1:00 PM	67%	67%	85%	73%
2:00 PM	70%	57%	80%	69%
3:00 PM	64%	39%	74%	59%
4:00 PM	55%	38%	63%	52%
5:00 PM	42%	24%	52%	39%
6:00 PM	49%	28%	60%	46%
7:00 PM	45%	26%	83%	51%
8:00 PM	22%	19%	63%	34%
9:00 PM	9%	10%	31%	17%
AVG. OCCUPANCY	43%	42%	62%	49%

	Upper Lot	
Time	Count - 1167	Utilization
7:00 AM	79	7%
8:00 AM	298	26%
9:00 AM	958	82%
10:00 AM	1094	94%
11:00 AM	1063	91%
12:00 PM	1046	90%
1:00 PM	963	83%
2:00 PM	876	75%
3:00 PM	726	62%
4:00 PM	555	48%
5:00 PM	482	41%
6:00 PM	621	53%
7:00 PM	745	64%
8:00 PM	612	52%
9:00 PM	251	22%
SUPPLY/AVG OCCUPANCY	1167	59%

North Zone

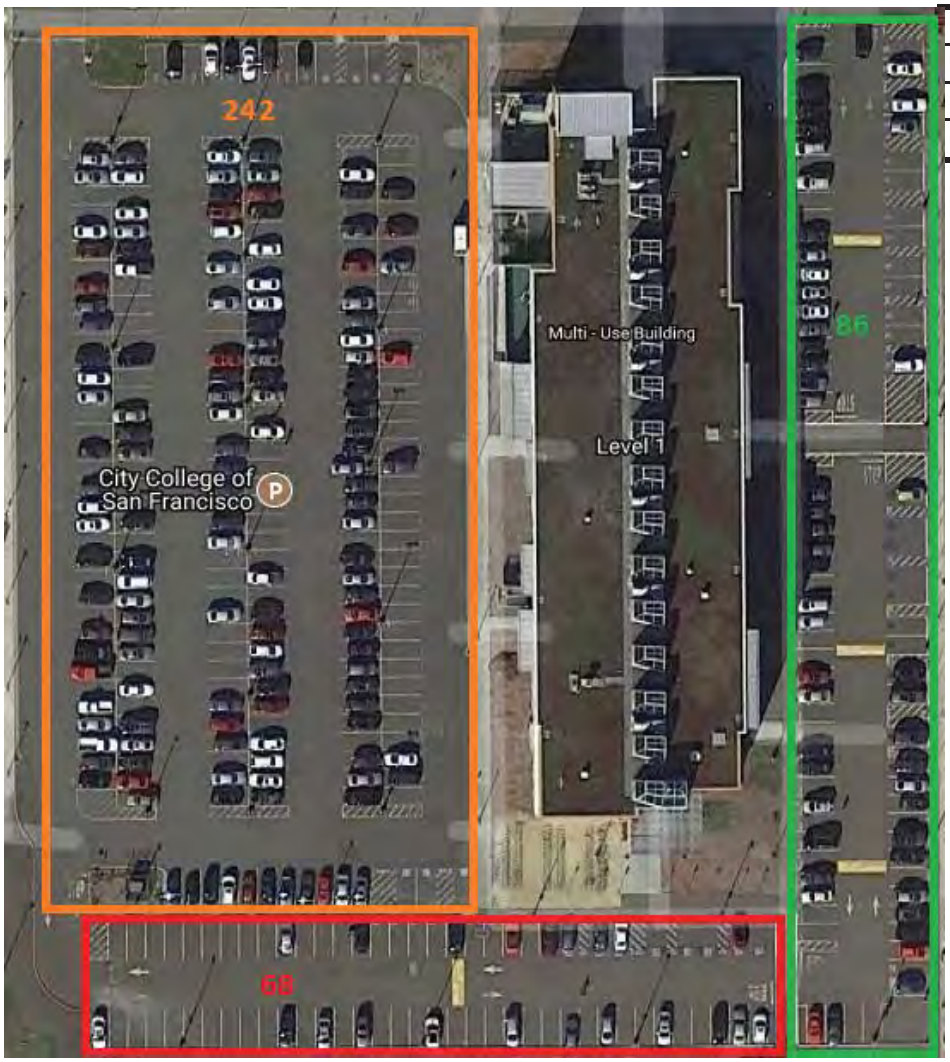


Zone	Overhead	On Site
Red	177	176
Orange	91	135
Yellow	263	236
Green	198	198

Notes:
"overhead" and "onsite" refers to the method used to count parking supply/inventory

* Aerial photo used for definition of sub areas for data collection. Aerial photos were not used for parking counts.

South Zone



Zone	Overhead	On Site
Red	68	69
Orange	242	242
Green	86	84

Notes:
"overhead" and "onsite" refers to the method used to count parking supply/inventory

* Aerial photo used for definition of sub areas for data collection. Aerial photos were not used for parking counts.

Wednesday, April 18, 2018

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

2455 Bates Ave, Suite C
Concord, CA 94529
Ph: 925-587-5026

Date Counted: 4/18/2018
Location: Lower Lot

	North Zone				
	Count				
Time	Red - 122	Orange - 156	Yellow - 156	Green - 131	Total
7:00 AM	1	1	0	0	2
8:00 AM	2	1	0	0	3
9:00 AM	2	3	1	0	6
10:00 AM	19	29	5	39	92
11:00 AM	30	47	21	80	178
12:00 PM	25	30	18	53	126
1:00 PM	19	21	60	45	145
2:00 PM	11	17	8	20	56
3:00 PM	8	13	5	18	44
4:00 PM	1	7	6	8	22
5:00 PM	1	5	2	1	9
6:00 PM	1	4	2	1	8
7:00 PM	1	2	1	2	6
8:00 PM	1	1	1	0	3
9:00 PM	1	1	1	0	3
SUPPLY	122	156	156	131	565

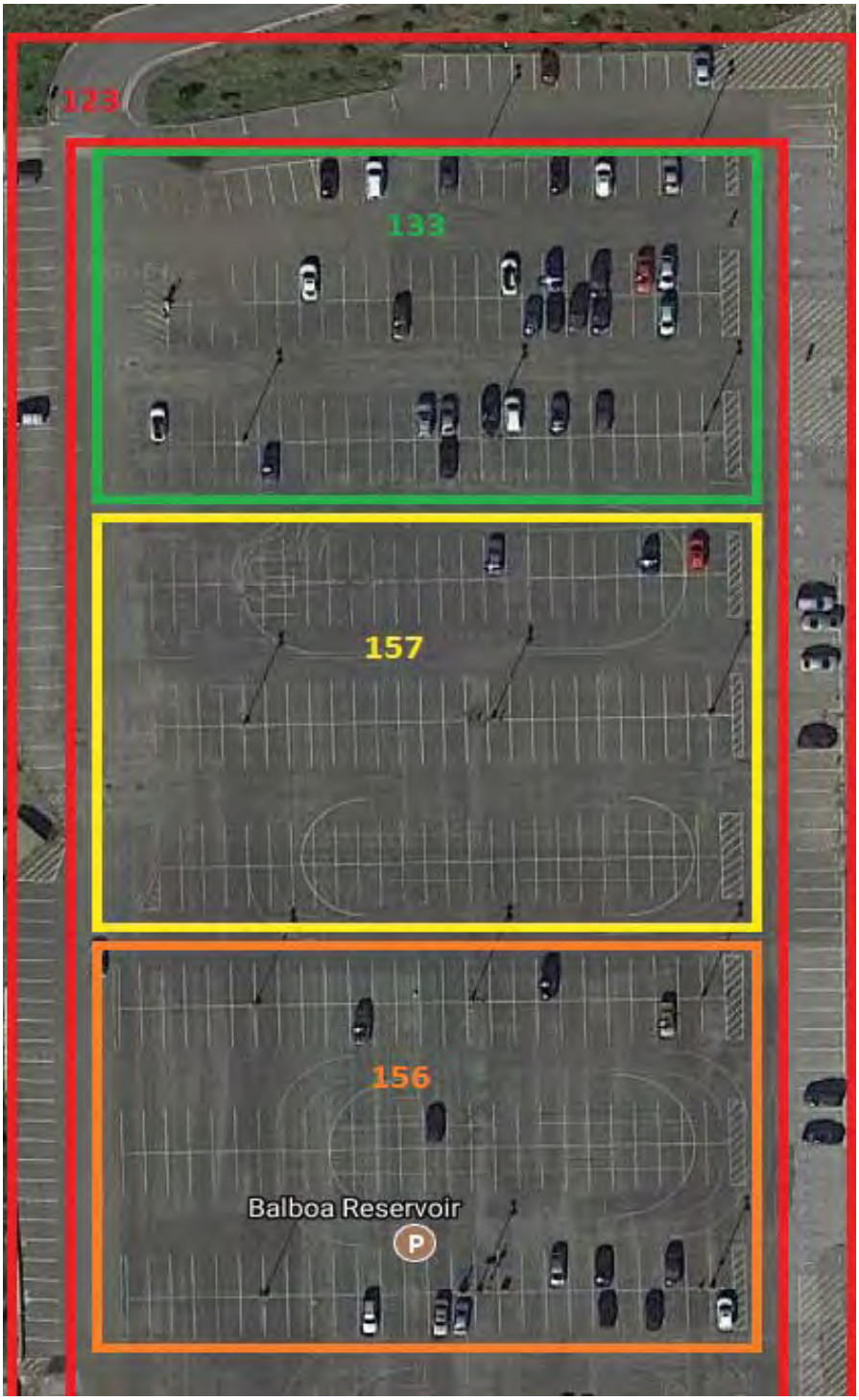
	North Zone				
	Utilization				
Time	Red - 122	Orange - 156	Yellow - 156	Green - 131	Average
7:00 AM	1%	1%	0%	0%	0%
8:00 AM	2%	1%	0%	0%	1%
9:00 AM	2%	2%	1%	0%	1%
10:00 AM	16%	19%	3%	30%	17%
11:00 AM	25%	30%	13%	61%	32%
12:00 PM	20%	19%	12%	40%	23%
1:00 PM	16%	13%	38%	34%	25%
2:00 PM	9%	11%	5%	15%	10%
3:00 PM	7%	8%	3%	14%	8%
4:00 PM	1%	4%	4%	6%	4%
5:00 PM	1%	3%	1%	1%	2%
6:00 PM	1%	3%	1%	1%	1%
7:00 PM	1%	1%	1%	2%	1%
8:00 PM	1%	1%	1%	0%	1%
9:00 PM	1%	1%	1%	0%	1%
AVG. OCCUPANCY	7%	8%	6%	14%	8%

	South Zone			
	Count			
Time	Red - 89	Orange - 197	Green - 156	Total
7:00 AM	1	0	0	1
8:00 AM	1	0	0	1
9:00 AM	3	0	0	3
10:00 AM	21	6	7	34
11:00 AM	26	18	16	60
12:00 PM	30	10	15	55
1:00 PM	22	8	12	42
2:00 PM	16	7	6	29
3:00 PM	12	6	5	23
4:00 PM	12	4	1	17
5:00 PM	7	3	3	13
6:00 PM	5	3	1	9
7:00 PM	2	2	0	4
8:00 PM	1	1	0	2
9:00 PM	1	1	0	2
SUPPLY	69	197	156	422

	South Zone			
	Utilization			
Time	Red - 89	Orange - 197	Green - 156	Average
7:00 AM	1%	0%	0%	0%
8:00 AM	1%	0%	0%	0%
9:00 AM	3%	0%	0%	1%
10:00 AM	24%	3%	4%	10%
11:00 AM	29%	9%	10%	16%
12:00 PM	34%	5%	10%	16%
1:00 PM	25%	4%	8%	12%
2:00 PM	18%	4%	4%	8%
3:00 PM	13%	3%	3%	7%
4:00 PM	13%	2%	1%	5%
5:00 PM	8%	2%	2%	4%
6:00 PM	6%	2%	1%	3%
7:00 PM	2%	1%	0%	1%
8:00 PM	1%	1%	0%	1%
9:00 PM	1%	1%	0%	1%
AVG. OCCUPANCY	12%	2%	3%	6%

	Lower Lot	
Time	Count - 1007	Utilization
7:00 AM	3	0%
8:00 AM	4	0%
9:00 AM	9	1%
10:00 AM	126	13%
11:00 AM	238	24%
12:00 PM	181	18%
1:00 PM	187	19%
2:00 PM	85	8%
3:00 PM	67	7%
4:00 PM	39	4%
5:00 PM	22	2%
6:00 PM	17	2%
7:00 PM	10	1%
8:00 PM	5	0%
9:00 PM	5	0%
SUPPLY/AVG. OCCUPANCY	1007	7%

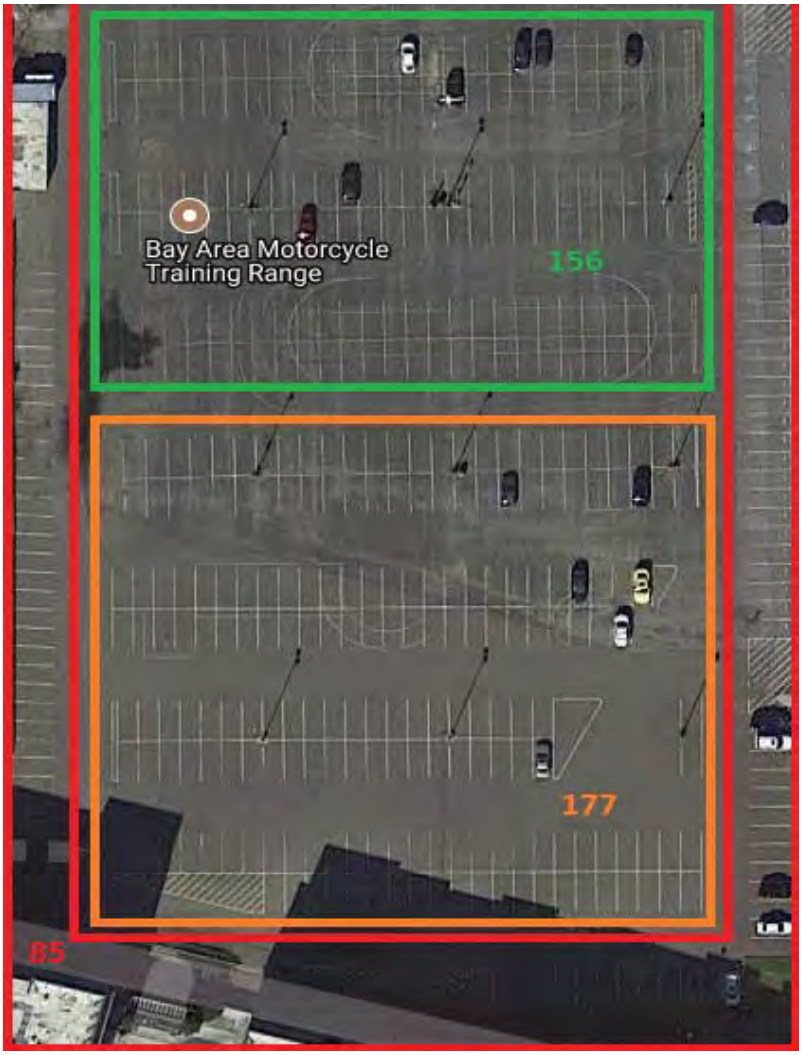
North Zone



Zone	Overhead	On Site
Red	123	122
Orange	156	156
Yellow	157	156
Green	133	131

Notes:
"overhead" and "onsite" refers to the method used to count parking supply/inventory

South Zone



Zone	Overhead	On Site
Red	85	89
Orange	177	197
Green	156	156

Notes:
"overhead" and "onsite" refers to the method used to count parking supply/inventory

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

2455 Bates Ave, Suite C
Concord, CA 94529
Ph: 925-587-5026

Date Counted: 4/18/2018
Location: Upper Lot

	North Zone				
	Count				
Time	Red - 176	Orange - 135	Yellow - 263	Green - 198	Total
7:00 AM	8	17	2	3	30
8:00 AM	50	74	29	42	195
9:00 AM	163	74	223	42	502
10:00 AM	175	74	223	42	514
11:00 AM	170	132	247	190	739
12:00 PM	164	128	214	198	704
1:00 PM	167	134	196	159	656
2:00 PM	109	115	163	145	532
3:00 PM	121	97	138	92	448
4:00 PM	108	91	88	74	361
5:00 PM	88	95	72	62	317
6:00 PM	88	100	74	97	359
7:00 PM	116	115	86	129	446
8:00 PM	107	104	77	133	421
9:00 PM	41	28	12	32	113
SUPPLY	176	139	263	198	776

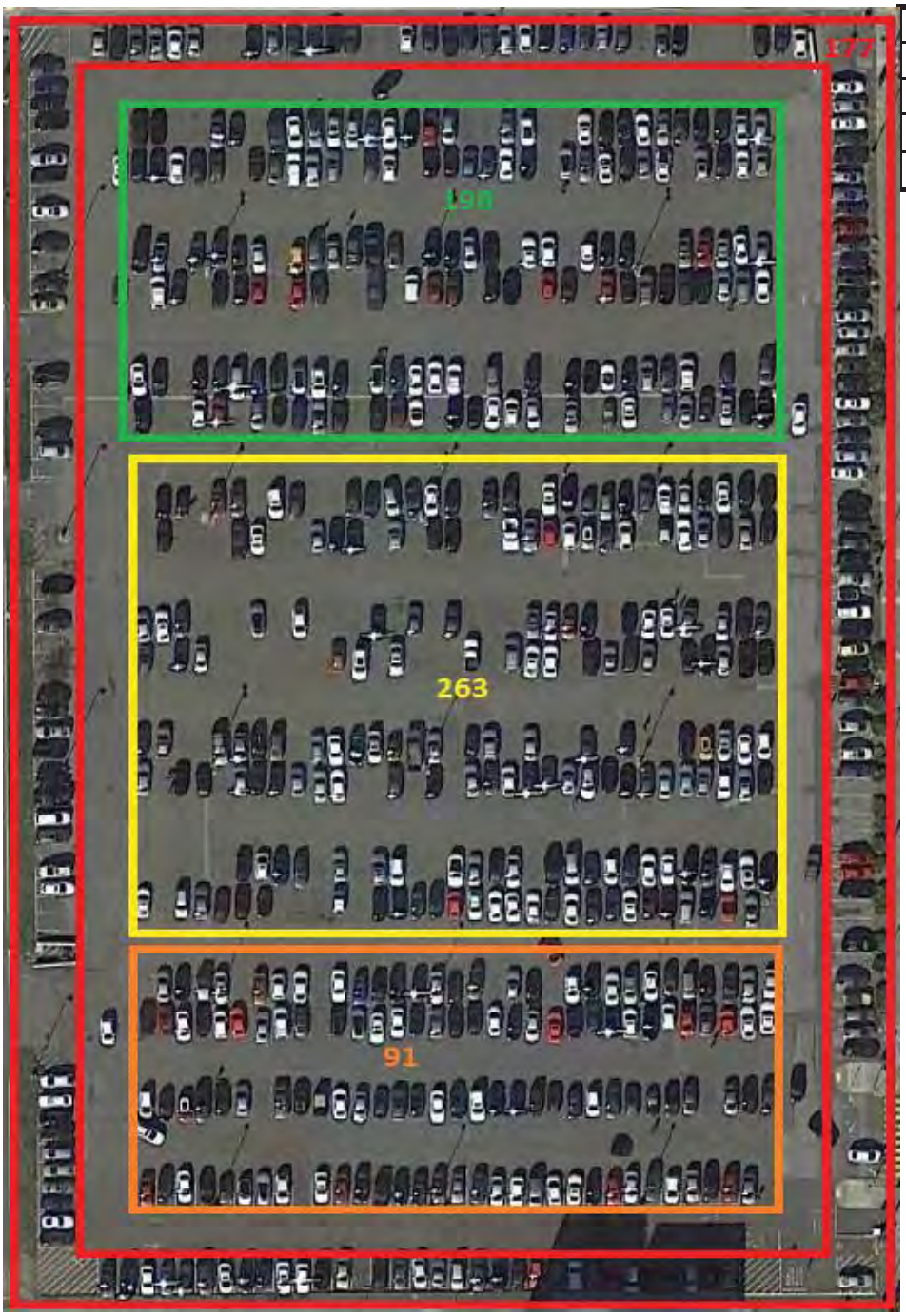
	North Zone				
	Utilization				
Time	Red - 176	Orange - 135	Yellow - 263	Green - 198	Average
7:00 AM	5%	13%	1%	2%	5%
8:00 AM	28%	55%	11%	21%	29%
9:00 AM	93%	55%	85%	21%	63%
10:00 AM	99%	55%	85%	21%	65%
11:00 AM	97%	98%	94%	96%	96%
12:00 PM	93%	95%	81%	100%	92%
1:00 PM	95%	99%	75%	80%	87%
2:00 PM	62%	85%	62%	73%	71%
3:00 PM	69%	72%	52%	46%	60%
4:00 PM	61%	67%	33%	37%	50%
5:00 PM	50%	70%	27%	31%	45%
6:00 PM	50%	74%	28%	49%	50%
7:00 PM	66%	85%	33%	65%	62%
8:00 PM	61%	77%	29%	67%	59%
9:00 PM	23%	21%	5%	16%	16%
AVG. OCCUPANCY	63%	68%	47%	48%	57%

	South Zone			
	Count			
Time	Red - 69	Orange - 242	Green - 84	Total
7:00 AM	6	14	6	26
8:00 AM	15	35	20	70
9:00 AM	25	128	51	204
10:00 AM	41	217	75	333
11:00 AM	55	210	74	339
12:00 PM	61	171	73	305
1:00 PM	58	158	67	283
2:00 PM	61	131	68	260
3:00 PM	61	99	25	185
4:00 PM	46	81	48	175
5:00 PM	32	62	38	132
6:00 PM	30	59	41	130
7:00 PM	15	60	42	117
8:00 PM	10	47	32	89
9:00 PM	7	15	6	28
SUPPLY	69	242	84	395

	South Zone			
	Utilization			
Time	Red - 69	Orange - 242	Green - 84	Average
7:00 AM	9%	6%	7%	7%
8:00 AM	22%	14%	24%	20%
9:00 AM	36%	53%	61%	50%
10:00 AM	59%	90%	89%	79%
11:00 AM	80%	87%	88%	85%
12:00 PM	88%	71%	87%	82%
1:00 PM	84%	65%	80%	76%
2:00 PM	88%	54%	81%	74%
3:00 PM	88%	41%	30%	53%
4:00 PM	67%	33%	57%	52%
5:00 PM	46%	26%	45%	39%
6:00 PM	43%	24%	49%	39%
7:00 PM	22%	25%	50%	32%
8:00 PM	14%	19%	38%	24%
9:00 PM	10%	6%	7%	8%
AVG. OCCUPANCY	51%	41%	53%	48%

	Upper Lot	
Time	Count - 1167	Utilization
7:00 AM	56	5%
8:00 AM	265	23%
9:00 AM	706	60%
10:00 AM	847	73%
11:00 AM	1078	92%
12:00 PM	1009	86%
1:00 PM	939	80%
2:00 PM	792	68%
3:00 PM	633	54%
4:00 PM	536	46%
5:00 PM	449	38%
6:00 PM	489	42%
7:00 PM	563	48%
8:00 PM	510	44%
9:00 PM	141	12%
SUPPLY/AVG. OCCUPANCY	1167	51%

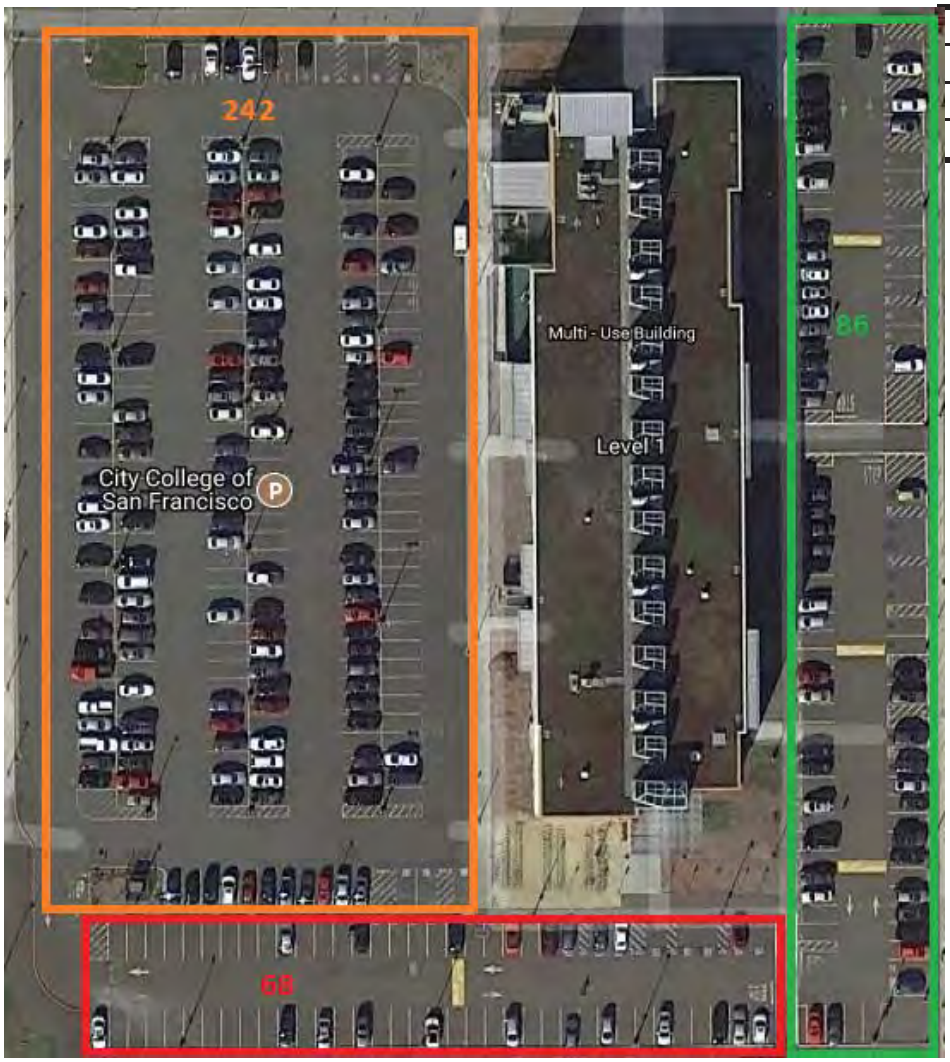
North Zone



Zone	Overhead	On Site
Red	177	176
Orange	91	135
Yellow	263	236
Green	198	198

Notes:
"overhead" and "onsite" refers to the method used to count parking supply/inventory

South Zone



Zone	Overhead	On Site
Red	68	69
Orange	242	242
Green	86	84

Notes:
"overhead" and "onsite" refers to the method used to count parking supply/inventory

Appendix C: Trip Generation and VMT Reduction Calculations and Comparison for Developer's Proposed Option and Additional Housing Option

Balboa Reservoir

Developer's Proposed Option - Daily Travel Demand Comparison

Comparable Project - Daily Person and Vehicle Trip Generation

	Daily Person and Vehicle Trip Estimates			
Mode	**Residential**	**Child Care**	**Retail**	**Total**
Auto	3,923	109	611	4,643
Taxi/TNC	344	3	11	358
Public Transit	1,849	6	177	2,032
Walk	3,323	9	309	3,641
Bike	374	1	12	387
Total Person Trips	**9,813**	**128**	**1,120**	**11,061**
Total Vehicle Trips	***2,930***	***102***	***409***	***3,441***

Notes:

Office rates applied to child care use for purposes of analysis.

Average vehicle occupancy of 1.67 applied for Taxi/TNC person trips for all land uses.

Average vehicle occupancy for auto person trips of 1.44 for residential; 1.09 for child care; 1.52 for retail.

Developer's Proposed Option

Transportation Demand Management Program - Transportation Efficiency

			Transportation Efficiency		
TDM Measure Description	**CAPCOA GHG Report Reference**	**Target User Group**	*Low*	*High*	*Project*
Improve Biking/Walking	SDT-1	All	0.0%	2.0%	1.0%
Bicycle Parking	ADT-6/LUT-9	All	0.6%	0.6%	0.6%
Car Share Program	TRT-3	All	5.0%	15.0%	5.0%
Unbundle Parking	PDT-2	All	2.6%	13.0%	4.3%
Limit On-Site Parking Supply	PDT-1	All	5.0%	12.5%	8.8%
Improved Design of Development	LUT-9	All	3.0%	21.3%	10.7%
Additive Total			***16.2%***	***64.4%***	***30.4%***

Source: CAPCOA

Notes:

Improved design of development includes: wayfinding, real-time information displays, bicycle repair, subsidized bike share membership, showers and lockers, delivery supportive amenities, family TDM amenities (storage units, cargo bikes and parking spaces, shopping carts), tailored marketing

Total transportation efficiency range (low to high) is not additive. Total transportation efficiency range estimated for the project (Developer's Proposed Option and Additional Housing Option) would be additive as the estimated project efficiency is conservative and accounts for other measures selected for the proposed TDM program.

Transportation Demand Management Program - Vehicle Trip Reduction

	Developer's Proposed Option with TDM Plan			
Daily Estimate	**Residential**	**Child Care**	**Retail**	**Total**
Vehicle Trips	2,041	71	285	2,397
Vehicle Trips Reduction	889	31	124	1,044

Existing Vehicle Trips to Project Site

Vehicle Trips	**Number**	**Percent**
Vehicle Trip Reduction	167	4.9%

Notes:

Existing daily vehicle trip generation reduced by 74% to account for the public parking (750 spaces) that would be provided on the project site with the Developer's Proposed Option

Balboa Reservoir

Additional Housing Option - Daily Travel Demand Comparison

Comparable Project - Daily Person and Vehicle Trip Generation

	Daily Person and Vehicle Trip Estimates			
Mode	**Residential**	**Child Care**	**Retail**	**Daily Total**
Auto	5,288	109	611	6,008
Taxi/TNC	464	3	11	478
Public Transit	2,491	6	177	2,674
Walk	4,479	9	309	4,797
Bike	504	1	12	517
Total Person Trips	**13,226**	**128**	**1,120**	**14,474**
Total Vehicle Trips	***3,950***	***102***	***409***	***4,460***

Notes:

Office rates applied to child care use for purposes of analysis.

Average vehicle occupancy of 1.67 applied for Taxi/TNC person trips for all land uses.

Average vehicle occupancy for auto person trips of 1.44 for residential; 1.09 for child care; 1.52 for retail.

Additional Housing Option

Transportation Demand Management Program - Transportation Efficiency

			Transportation Efficiency		
TDM Measure Description	**CAPCOA GHG Report Reference**	**Target User Group**	*Low*	*High*	*Project*
Improve Biking/Walking	SDT-1	All	0.0%	2.0%	1.0%
Bicycle Parking	ADT-6/LUT-9	All	0.6%	0.6%	0.6%
Car Share Program	TRT-3	All	5.0%	15.0%	5.0%
Unbundle Parking	PDT-2	All	2.6%	13.0%	4.3%
Limit On-Site Parking Supply	PDT-1	All	5.0%	12.5%	8.8%
Improved Design of Development	LUT-9	All	3.0%	21.3%	10.7%
Additive Total			***16.2%***	***64.4%***	***30.4%***

Source: CAPCOA

Notes:

Improved design of development includes: wayfinding, real-time information displays, bicycle repair, subsidized bike share membership, showers and lockers, delivery supportive amenities, family TDM amenities (storage units, cargo bikes and parking spaces, shopping carts), tailored marketing

Total transportation efficiency range (low to high) is not additive. Total transportation efficiency range estimated for the project (Developer's Proposed Option and Additional Housing Option) would be additive as the estimated project efficiency is conservative and accounts for other measures selected for the proposed TDM program.

Existing Vehicle Trips - Trip Credits

Vehicle Trips	**Number**	**Percent**
Vehicle Trip Reduction	644	14.4%

Transportation Demand Management Program - Vehicle Trip Reduction

	Additional Housing Option with TDM Plan			
Daily Estimate	**Residential**	**Child Care**	**Retail**	**Total**
Vehicle Trips	2,751	71	285	3,107
Vehicle Trips Reduction	1,199	31	124	1,354

Balboa Reservoir

Transportation Demand Management Program

TDM Measure Description	CAPCOA GHG Report Reference	Target User Group	Transportation Efficiency *Low*	*High*	*Project*
Improve Biking/Walking	SDT-1	All	0.0%	2.0%	1.0%
Bicycle Parking	ADT-6/LUT-9	All	0.6%	0.6%	0.6%
Car Share Program	TRT-3	All	5.0%	15.0%	5.0%
Unbundle Parking	PDT-2	All	2.6%	13.0%	4.3%
Limit On-Site Parking Supply	PDT-1	All	5.0%	12.5%	8.8%
Improved Design of Development	LUT-9	All	3.0%	21.3%	10.7%
Additive Total			***16.2%***	***64.4%***	***30.4%***

Source: CAPCOA

Notes:

Improved design of development includes: wayfinding, real-time information displays, bicycle repair, subsidized bike share membership, showers and lockers, delivery supportive amenities, family TDM amenities (storage units, cargo bikes and parking spaces, shopping carts), tailored marketing

Total transportation efficiency range (low to high) is not additive. Total transportation efficiency range estimated for the project (Developer's Proposed Option and Additional Housing Option) would be additive as the estimated project efficiency is conservative and accounts for other measures selected for the proposed TDM program.

Developer's Proposed Option with TDM Plan

Daily Estimate	Residential	Child Care	Retail	Total
Vehicle Trips	2,041	71	285	**2,397**
Vehicle Trips Reduction	889	31	124	**1,044**

Notes: Existing daily vehicle trip generation reduced by 74% to account for the public parking (750 spaces) that would be provided on the project site with the Developer's Proposed Option

Additional Housing Option with TDM Plan

Daily Estimate	Residential	Child Care	Retail	Total
Vehicle Trips	2,751	71	285	**3,107**
Vehicle Trips Reduction	1,199	31	124	**1,354**

Balboa Reservoir

Elimination of Existing Trips

Time Period	Inbound	Outbound	Total	Peak Hour Percent of Daily // Existing Site Percent of Total Driveway Trips
Driveway Counts at Existing Site				
Weekday a.m. Peak Hour	335	164	499	8.15%
Weekday p.m. Peak Hour	204	283	487	8.50%
Estimated Peak Hour Vehicle Trips at Existing Site				
Weekday a.m. Peak Hour	36	17	53	10.6%
Weekday p.m. Peak Hour	22	30	52	10.7%
Total of AM & PM	**58**	**47**	**105**	
Estimated Daily Vehicle Trips at Existing Site				
Based on AM Counts	442	209	650	
Based on PM Counts	270	368	638	
Estimated Daily Vehicle Trips (Average of AM & PM)	**356**	**288**	**644**	

Balboa Reservoir

Project Description

Land Use	Units	Percent	Developer's Proposed Option	Additional Housing Option
Residential	Units		1,100	1550
	Studio / One-Bedroo	40%	440	620
	Two-Bedroom	30%	330	465
	Three-Bedroom	30%	330	465
Child Care	Square Feet		10000	10000
Retail	Square Feet		7500	7500
Residential Parking	Spaces		550	650
	Ratio		0.50	0.42
Public Parking	Spaces		750	0
	Percent of Existing		74%	0%

ATTACHMENT D
San Francisco Administrative Code Chapter 12R: Minimum Wage

Print

San Francisco Administrative Code

CHAPTER 12R: MINIMUM WAGE

Sec. 12R.1. Title.
Sec. 12R.2. Authority.
Sec. 12R.3. Definitions.
Sec. 12R.4. Minimum Wage.
Sec. 12R.5. Notice, Posting and Payroll Records.
Sec. 12R.6. Retaliation Prohibited.
Sec. 12R.7. Implementation and Enforcement.
Sec. 12R.8. Waiver Through Collective Bargaining.
Sec. 12R.9. Relationship to Other Requirements.
Sec. 12R.10. Application of Minimum Wage to Welfare-to-Work Programs.
Sec. 12R.11. Operative Date.
Sec. 12R.12. Severability.
Sec. 12R.13. Amendment by the Board of Supervisors.
Sec. 12R.14. Civil Actions.
Sec. 12R.15. Remedies Cumulative.
Sec. 12R.16. Administrative Penalties and Citations.
Sec. 12R.17. Violations.
Sec. 12R.18. Administrative Citation; Notice of Violation.
Sec. 12R.19. Administrative Citation and Notice of Violation; Service.
Sec. 12R.20. Administrative Citation; Contents.
Sec. 12R.21. Administrative Appeal.
Sec. 12R.22. Regulations.
Sec. 12R.23. Judicial Review.
Sec. 12R.24. Other Remedies Not Affected.
Sec. 12R.25. Outreach.
Sec. 12R.26. Reports.

SEC. 12R.1. TITLE.

This Chapter shall be known as the "Minimum Wage Ordinance."

(Added by Proposition L, 11/4/2003)

SEC. 12R.2. AUTHORITY.

This Chapter is adopted pursuant to the powers vested in the City and County of San Francisco ("the City") under the laws and Constitution of the State of California and the City Charter including, but not

limited to, the police powers vested in the City pursuant to Article XI, Section 7 of the California Constitution and Section 1205(b) of the California Labor Law.

(Added by Proposition L, 11/4/2003)

SEC. 12R.3. DEFINITIONS.

As used in this Chapter, the following capitalized terms shall have the following meanings:

"Agency" shall mean the Office of Labor Standards Enforcement or its successor agency.

"City" shall mean the City and County of San Francisco.

"Employee" shall mean any person who:

(a) In a particular week performs at least two (2) hours of work for an Employer within the geographic boundaries of the City; and

(b) Qualifies as an employee entitled to payment of a minimum wage from any employer under the California minimum wage law, as provided under Section 1197 of the California Labor Code and wage orders published by the California Industrial Welfare Commission, or is a participant in a Welfare-to-Work Program.

"Employer" shall mean any person, as defined in Section 18 of the California Labor Code, including corporate officers or executives, who directly or indirectly or through an agent any other person, including through the services of a temporary services or staffing agency or similar entity, employs or exercises control over the wages, hours or working conditions of any Employee. "Employer" shall include the City and the San Francisco In-Home Supportive Services Public Authority.

"Government Supported Employee" shall mean any Employee who is: (1) under the age of 18 and is employed as an after-school or summer Employee in a bona fide training or apprenticeship program in a position that is subsidized by the federal, state, or local government; or (2) over the age 55 and is employed by a Non-Profit Corporation that provides social welfare services as a core mission to individuals who are over the age of 55 and is in a position that is subsidized by federal, state, or local government. The second category shall apply only to Non-Profit Corporations operating as of January 1, 2015, and apply only as to the number of employees over the age of 55 holding positions in the Corporation as of January 1, 2015 that are subsidized by federal, state, or local government, plus 25% of that number. Any employees hired by a Non-Profit Corporation after January 1, 2015 that exceed the numerical threshold in the prior sentence (including the additional 25%) shall not qualify as "Government Supported Employees." If at any time the number of employees over the age of 55 holding positions in the Corporation that are subsidized by federal, state, or local government falls below that numerical threshold (including the additional 25%), then those positions shall qualify as "Government Supported Employee" positions.

"Minimum Wage" shall have the meaning set forth in Section 12R.4 of this Chapter.

"Nonprofit Corporation" shall mean a nonprofit corporation, duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation and (if a foreign corporation) in good standing under the laws of the State of California, which corporation has established and maintains valid nonprofit status under Section 501(c)(3) of the United States Internal Revenue Code of 1986, as amended, and all rules and regulations promulgated under such Section.

"Welfare-to-Work Program" shall mean the City's CalWORKS Program, County Adult Assistance Program (CAAP) which includes the Personal Assisted Employment Services (PAES) Program, and General Assistance Program, and any successor programs that are substantially similar to them.

(Added by Proposition L, 11/4/2003; amended by Proposition J, 11/4/2014)

SEC. 12R.4. MINIMUM WAGE.

(a) Employers shall pay Employees no less than the Minimum Wage for each hour worked within the geographic boundaries of the City.

(1) Except as provided in subsection 12R.4(b), the Minimum Wage paid to Employees shall be as follows:

(A) Beginning on May 1, 2015, the Minimum Wage shall be an hourly rate of $12.25.

(B) Beginning on July 1, 2016, the Minimum Wage shall be an hourly rate of $13.00.

(C) Beginning on July 1, 2017, the Minimum Wage shall be an hourly rate of $14.00.

(D) Beginning on July 1, 2018, the Minimum Wage shall be an hourly rate of $15.00.

(E) Beginning on July 1, 2019, and each year thereafter, the Minimum Wage shall increase by an amount corresponding to the prior year's increase, if any, in the Consumer Price Index for urban wage earners and clerical workers for the San Francisco-Oakland-San Jose, CA metropolitan statistical area, as determined by the Controller.

(b) Beginning on May 1, 2015, the Minimum Wage paid to Government Supported Employees shall be an hourly rate of $12.25. Beginning on July 1, 2016, and each year thereafter, the Minimum Wage paid to Government Supported Employees shall increase by an amount corresponding to the prior year's increase, if any, in the Consumer Price Index for urban wage earners and clerical workers for the San Francisco-Oakland-San Jose, CA metropolitan statistical area, as determined by the Controller.

(Added by Proposition L, 11/4/2003; amended by Proposition J, 11/4/2014)

SEC. 12R.5. NOTICE, POSTING AND PAYROLL RECORDS.

(a) By December 1 of each year, the Agency shall publish and make available to Employers a bulletin announcing the adjusted Minimum Wage rate for the upcoming year, which shall take effect on January 1. In conjunction with this bulletin, the Agency shall by December 1 of each year publish and make available to Employers, in all languages spoken by more than five percent of the San Francisco work force, a notice suitable for posting by Employers in the workplace informing Employees of the current Minimum Wage rate and of their rights under this Chapter.

(b) Every Employer shall post in a conspicuous place at any workplace or job site where any Employee works the notice published each year by the Agency informing Employees of t he current Minimum Wage rate and of their rights under this Chapter. Every Employer shall post such notices in English, Spanish, Chinese and any other language spoken by at least five percent of the Employees at the workplace or job site. Every Employer shall also provide each Employee at the time of hire the Employer's name, address and telephone number in writing.

(c) Employers shall retain payroll records pertaining to Employees for a period of four years, and shall allow the Agency access to such records, with appropriate notice and during business hours, to monitor compliance with the requirements of this Chapter. Where an Employer does not maintain or retain adequate records documenting wages paid or does not allow the Agency reasonable access to such records, it shall be presumed that the Employer paid no more than the applicable federal or state minimum wage, absent clear and convincing evidence otherwise.

(d) The Director of the Agency or his or her designee shall have access to all places of labor subject to this ordinance during business hours to inspect books and records, interview employees and investigate such matters necessary or appropriate to determine whether an Employer has violated any provisions of this ordinance.

(e) The Agency shall be authorized under Section 12R.7 to develop guidelines or rules to govern Agency investigative activities, including but not limited to legal action to be taken in the event of employer

noncompliance or interference with Agency investigative actions.

(Added by Proposition L, 11/4/2003; amended by Ord. 175-11, File No. 110594, App. 9/16/2011, Eff. 10/16/2011)

SEC. 12R.6. RETALIATION PROHIBITED.

It shall be unlawful for an Employer or any other party to discriminate in any manner or take adverse action against any person in retaliation for exercising rights protected under this Chapter. Rights protected under this Chapter include, but are not limited to: the right to file a complaint or inform any person about any party's alleged noncompliance with this Chapter; and the right to inform any person of his or her potential rights under this Chapter and to assist him or her in asserting such rights. Protections of this Chapter shall apply to any person who mistakenly, but in good faith, alleges noncompliance with this Chapter. Taking adverse action against a person within ninety (90) days of the person's exercise of rights protected under this Chapter shall raise a rebuttable presumption of having done so in retaliation for the exercise of such rights.

(Added by Proposition L, 11/4/2003)

SEC. 12R.7. IMPLEMENTATION AND ENFORCEMENT.

(a) **Enforcement Priority.** It is the policy of the City and County of San Francisco that all employees be compensated fairly according to the law and that Employers who engage in wage theft be held accountable. Towards that end, the Mayor and Board of Supervisors shall study and review the feasibility of enacting additional measures consistent with state law to enhance the Agency's enforcement tools and the City's efforts to combat wage theft. The Mayor and Board of Supervisors shall also take steps to ensure optimal collaboration among all City agencies and departments, as well as between the City and state and federal labor standards agencies, in the enforcement of this Chapter.

(b) **Implementation.** The Agency shall be authorized to coordinate implementation and enforcement of this Chapter and may promulgate appropriate guidelines or rules for such purposes consistent with this Chapter. Any guidelines or rules promulgated by the Agency shall have the force and effect of law and may be relied on by Employers, Employees and other parties to determine their rights and responsibilities under this Chapter. Any guidelines or rules may establish procedures for ensuring fair, efficient and cost-effective implementation of this Chapter, including supplementary procedures for helping to inform Employees of their rights under this Chapter, for monitoring Employer compliance with this Chapter, and for providing administrative hearings to determine whether an Employer or other person has violated the requirements of this Chapter. The Agency shall make every effort to resolve complaints in a timely manner and shall have a policy that the Agency shall take no more than one year to settle, request an administrative hearing under Section 12R.7(b), or initiate a civil action under Section 12R.7(c). The failure of the Agency to meet these timelines within one year shall not be grounds for closure or dismissal of the complaint.

(c) **Administrative Enforcement.**

(1) The Agency is authorized to take appropriate steps to enforce this Chapter. The Agency may investigate any possible violations of this Chapter by an Employer or other person. Where the Agency has reason to believe that a violation has occurred, it may order any appropriate temporary or interim relief to mitigate the violation or maintain the status quo pending completion of a full investigation or hearing.

(2) Where the Agency, after a hearing that affords a suspected violator due process, determines that a violation has occurred, it may order any appropriate relief including, but not limited to, reinstatement, the payment of any back wages unlawfully withheld, and the payment of an additional sum as an administrative penalty in the amount of $50 to each Employee or person whose rights under this Chapter were violated for each day that the violation occurred or continued. A violation for unlawfully withholding wages shall be deemed to continue from the date immediately following the date that the wages were due and payable as provided in Part 1 (commencing with Section 200) of Division 2 of the California Labor Code, to the date immediately preceding the date the wages are paid in full. Where prompt compliance is not forthcoming,

the Agency may take any appropriate enforcement action to secure compliance, including initiating a civil action pursuant to Section 12R.7(c) of this Chapter and/or, except where prohibited by state or federal law, requesting that City agencies or departments revoke or suspend any registration certificates, permits or licenses held or requested by the Employer or person until such time as the violation is remedied. All City agencies and departments shall cooperate with revocation or suspension requests from the Agency. In order to compensate the City for the costs of investigating and remedying the violation, the Agency may also order the violating Employer or person to pay to the City a sum of not more than $50 for each day and for each Employee or person as to whom the violation occurred or continued. Such funds shall be allocated to the Agency and shall be used to offset the costs of implementing and enforcing this Chapter. The amounts of all sums and payments authorized or required under this Chapter shall be updated annually for inflation, beginning January 1, 2005, using the inflation rate and procedures set forth in Section 4(b) 12R.4[1] of this Chapter.

(3) An Employee or other person may report to the Agency in writing any suspected violation of this Chapter. The Agency shall encourage reporting pursuant to this subsection by keeping confidential, to the maximum extent permitted by applicable laws, the name and other identifying information of the Employee or person reporting the violation. Provided, however, that with the authorization of such person, the Agency may disclose his or her name and identifying information as necessary to enforce this Chapter or for other appropriate purposes. In order to further encourage reporting by Employees, if the Agency notifies an Employer that the Agency is investigating a complaint, the Agency shall require the Employer to post or otherwise notify its Employees that the Agency is conducting an investigation, using a form provided by the Agency.

(d) **Civil Enforcement.** The Agency, the City Attorney, any person aggrieved by a violation of this Chapter, any entity a member of which is aggrieved by a violation of this Chapter, or any other person or entity acting on behalf of the public as provided for under applicable state law, may bring a civil action in a court of competent jurisdiction against the Employer or other person violating this Chapter and, upon prevailing, shall be entitled to such legal or equitable relief as may be appropriate to remedy the violation including, without limitation, the payment of any back wages unlawfully withheld, the payment of an additional sum as penalties in the amount of $50 to each Employee or person whose rights under this Chapter were violated for each day that the violation occurred or continued, reinstatement in employment and/or injunctive relief, and shall be awarded reasonable attorneys' fees and costs. Provided, however, that any person or entity enforcing this Chapter on behalf of the public as provided for under applicable state law shall, upon prevailing, be entitled only to equitable, injunctive or restitutionary relief, and reasonable attorneys' fees and costs. Nothing in this Chapter shall be interpreted as restricting, precluding, or otherwise limiting a separate or concurrent criminal prosecution under the Municipal Code or state law. Jeopardy shall not attach as a result of any administrative or civil enforcement action taken pursuant to this Chapter.

(e) **Interest.** In any administrative or civil action brought for the nonpayment of wages under this Section, the Agency or court, as the case may be, shall award interest on all due and unpaid wages at the rate of interest specified in subdivision (b) of Section 3289 of the California Civil Code, which shall accrue from the date that the wages were due and payable as provided in Part 1 (commencing with Section 200) of Division 2 of the California Labor Code, to the date the wages are paid in full.

(f) **Posting Notice of Violation.** If an Employer fails to comply with a settlement agreement with the Agency, a final determination by the Agency after an administrative hearing officer issues a decision after a hearing under Section 12R.7(b), an administrative citation issues under Section 12R.19, a decision made in an administrative appeal brought under Section 12R.21, or judgment issued by the Superior Court, and the Employer has not filed an appeal from the administrative hearing decision, administrative citation, administrative appeal decision, or judgment, or the appeal is final, the Agency may require the Employer to post public notice of the Employer's failure to comply in a form determined by the Agency.

(g) **City Employees.** Where the aggrieved party is an Employee of the City, the Employee shall be entitled to all rights and remedies available under this Section 12R.7 except the Employee may not recover the $50 per diem penalty provided for in subsections (b) and (c) of this Section 12R.7.

(Added by Proposition L, 11/4/2003; amended by Ord. 205-06, File No. 060247, App. 7/25/2006; Ord. 175-11, File No. 110594, App. 9/16/2011, Eff. 10/16/2011; Proposition J, 11/4/2014)

CODIFICATION NOTES

1. So in Proposition J.

SEC. 12R.8. WAIVER THROUGH COLLECTIVE BARGAINING.

All or any portion of the applicable requirements of this Chapter shall not apply to Employees covered by a bona fide collective bargaining agreement to the extent that such requirements are expressly waived in the collective bargaining agreement in clear and unambiguous terms.

(Added by Proposition L, 11/4/2003)

SEC. 12R.9. RELATIONSHIP TO OTHER REQUIREMENTS.

This Chapter provides for payment of a minimum wage and shall not be construed to preempt or otherwise limit or affect the applicability of any other law, regulation, requirement, policy or standard that provides for payment of higher or supplemental wages or benefits, or that extends other protections including, but not limited to, the San Francisco Minimum Compensation Ordinance.

(Added by Proposition L, 11/4/2003)

SEC. 12R.10. APPLICATION OF MINIMUM WAGE TO WELFARE-TO-WORK PROGRAMS.

The Minimum Wage established pursuant to Section 12R.4 of this Chapter shall apply to the City's Welfare-to-Work Programs under which persons must perform work in exchange for receipt of benefits. Participants in Welfare-to-Work Programs shall not, during a given benefits period, be required to work more than a number of hours equal to the value of all cash benefits received during that period, divided by the Minimum Wage. Where state or federal law would preclude the City from reducing the number of work hours required under a given Welfare-to-Work Program, the City may comply with this Section by increasing the cash benefits awarded so that their value is no less than the product of the Minimum Wage multiplied by the number of work hours required.

(Added by Proposition L, 11/4/2003; amended by Proposition J, 11/4/2014)

SEC. 12R.11. OPERATIVE DATE.

The changes to this Chapter adopted at the November 4, 2014 municipal election shall have prospective effect only and shall become operative on May 1, 2015.

(Added by Proposition L, 11/4/2003; amended by Proposition J, 11/4/2014)

SEC. 12R.12. SEVERABILITY.

If any part or provision of this Chapter, or the application of this Chapter to any person or circumstance, is held invalid, the remainder of this Chapter, including the application of such part or provisions to other persons or circumstances, shall not be affected by such a holding and shall continue in full force and effect. To this end, the provisions of this Chapter are severable.

(Added by Proposition L, 11/4/2003)

SEC. 12R.13. AMENDMENT BY THE BOARD OF SUPERVISORS.

This Chapter may be amended by the Board of Supervisors as regards the implementation or enforcement thereof, but not as regards the substantive requirements of the Chapter or its scope of coverage.

(Added by Proposition L, 11/4/2003)

SEC. 12R.14. CIVIL ACTIONS.

In addition to the actions provided for in Section 12R.7(c), the City Attorney may bring a civil action to enjoin any violation of this Chapter. The City shall be entitled to its attorney's fees and costs in any action brought pursuant to this Section where the City is the prevailing party.

(Added by Ord. 205-06, File No. 060247, App. 7/25/2006)

SEC. 12R.15. REMEDIES CUMULATIVE.

The remedies, penalties and procedures provided under this Chapter are cumulative and are not intended to be exclusive of any other available remedies, penalties and procedures.

(Added by Ord. 205-06, File No. 060247, App. 7/25/2006)

SEC. 12R.16. ADMINISTRATIVE PENALTIES AND CITATIONS.

(a) **Administrative Penalties; Citations.** An administrative penalty may be assessed for a violation of the provisions of this Chapter as specified below. The penalty may be assessed by means of an administrative citation issued by the Director of the Office of Labor Standards Enforcement.

(b) **Administrative Penalty Amounts.** In addition to all other civil penalties provided for by law, the following violations shall be subject to administrative penalties in the amounts set forth below:

VIOLATION	PENALTY AMOUNT
Failure to maintain payroll records or to retain payroll records for four years – Administrative Code Section 12R.5(c)	$500.00
Failure to allow the Office of Labor Standards Enforcement to inspect payroll records – Administrative Code Section 12R.5(c)	$500.00
Retaliation for exercising rights under Minimum Wage Ordinance – Administrative Code Section 12R.6 The Penalty for retaliation is $1,000.00 per employee.	$1,000.00
Failure to Post notice of Minimum Wage rate – Administrative Code Section 12R.5(b) Failure to provide notice of investigation to employees – Administrative Code Section 12R.7(b) Failure to post notice of violation to public – Administrative Code Section 12R.7(e) Failure to provide employer's name, address, and telephone number in writing – Administrative Code Section 12R.5(b)	$500.00

The penalty amounts shall be increased cumulatively by fifty percent (50%) for each subsequent violation of the same provision by the same employer or person within a three (3) year period. The maximum penalty amount that may be imposed by administrative citation in a calendar year for each type of violation listed above shall be $5,000 or $10,000 if a citation for retaliation is issued. In addition to the penalty amounts listed above, the Office of Labor Standards Enforcement may assess enforcement costs to cover the reasonable costs incurred in enforcing the administrative penalty, including reasonable attorneys' fees. Enforcement costs shall not count toward the $5,000 annual maximum.

(Added by Ord. 205-06, File No. 060247, App. 7/25/2006; amended by Ord. 175-11, File No. 110594, App. 9/16/2011, Eff. 10/16/2011)

SEC. 12R.17. VIOLATIONS.

(a) **Separate and Continuing Violations; Penalties Paid Do Not Cure Violations.** Each and every day that a violation exists constitutes a separate and distinct offense. Each section violated constitutes a separate violation for any day at issue. If the person or persons responsible for a violation fail to correct the violation within the time period specified on the citation and required under Section 12R.18, the Director of the Office of Labor Standards Enforcement may issue subsequent administrative citations for the uncorrected violation(s) without issuing a new notice as provided in Section 12R.18(b). Payment of the penalty shall not excuse the failure to correct the violation nor shall it bar any further enforcement action by the City. If penalties and costs are the subject of administrative appeal or judicial review, then the accrual of such penalties and costs shall be stayed until the determination of such appeal or review is final.

(b) **Payments to City; Due Date; Late Payment Penalty.** All penalties assessed under Section 12R.16 shall be payable to the City and County of San Francisco. Administrative penalties and costs assessed by means of an administrative citation shall be due within thirty (30) days from the date of the citation. The failure of any person to pay an administrative penalty and costs within that time shall result in the assessment of an additional late fee. The amount of the late fee shall be ten (10) percent of the total amount of the administrative penalty assessed for each month the penalty and any already accrued late payment penalty remains unpaid.

(c) **Collection of Penalties; Special Assessments.** The failure of any person to pay a penalty assessed by administrative citation under Section 12R.16 within the time specified on the citation constitutes a debt to the City. The City may file a civil action, create and impose liens as set forth below, or pursue any other legal remedy to collect such money.

(d) **Liens.** The City may create and impose liens against any property owned or operated by a person who fails to pay a penalty assessed by administrative citation. The procedures provided for in Chapter 10, Article XX of the Administrative Code shall govern the imposition and collection of such liens.

(e) **Payment to City.** The Labor Standards Enforcement Officer has the authority to require that payment of back wages found to be due and owing to employees be paid directly to the City and County of San Francisco for disbursement to the employees. The Controller shall hold the back wages in escrow for workers whom the Labor Standards Enforcement Officer, despite his/her best efforts, including any required public notice, cannot locate; funds so held for three years or more shall be dedicated to the enforcement of the Minimum Wage Ordinance or other laws enforced by the Office of Labor Standards Enforcement.

(Added by Ord. 205-06, File No. 060247, App. 7/25/2006; amended by Ord. 175-11, File No. 110594, App. 9/16/2011, Eff. 10/16/2011; Ord. 75-14 , File No. 140226, App. 5/28/2014, Eff. 6/27/2014; Proposition J, 11/4/2014)

SEC. 12R.18. ADMINISTRATIVE CITATION; NOTICE OF VIOLATION.

(a) **Issuance of Citation.** The Director has the authority to issue an administrative citation for any violation of this Chapter that is identified in Section 12R.16(b). The administrative citation shall be issued

on a form prescribed by the Office of Labor Standards Enforcement.

(b) **Notice and Opportunity to Cure.** In order to facilitate compliance, the Director of the Office of Labor Standards Enforcement ("Director") or his or her designee may notify any person in violation of the Code provisions identified in Section 12R.16(b) of such violation prior to the issuance of an administrative citation. Regardless of the manner of service of the notice under Section 12R.19, the Director or his or her designee may post the notice of violation by affixing the notice to a surface in a conspicuous place on property that is (1) the person's principal place of business in the City, or (2) if the person's principal place of business is outside the City, the fixed location within the City from or at which the person conducts business in the City, or (3) if the person does not regularly conduct business from a fixed location in the City, one of the following: (i) the location where the person maintains payroll records if the notice of violation is for violation of Section 12R.5(c), or (ii) the jobsite or other primary location where the person's employees perform services in the City at the time the notice is posted. The notice of violation shall specify the action required to correct or otherwise remedy the violation(s). At the discretion of the Director or his or her designee, the person or persons responsible for the violation may be allowed ten (10) days from the date of the notice of violation to establish that no violation occurred or such person or persons are not responsible for the violation, or correct or otherwise remedy the violation; provided, however, that the Director may, in his or her discretion, assign a longer period, not to exceed twenty-one (21) days, within which to correct or otherwise remedy each violation, or establish that no violation occurred or such person or persons are not responsible for the violation. The Director may consider the cost of correction and the time needed to obtain information, documents, data and records for correction in assigning a specific period of time within which to correct or otherwise remedy each violation, or obtain and submit evidence that no violation occurred or such person or persons are not responsible for the violation.

(Added by Ord. 205-06, File No. 060247, App. 7/25/2006; amended by Ord. 175-11, File No. 110594, App. 9/16/2011, Eff. 10/16/2011)

SEC. 12R.19. ADMINISTRATIVE CITATION AND NOTICE OF VIOLATION; SERVICE.

Service of a notice of violation and an administrative citation under Section 12R.16 may be accomplished as follows:

(a) The Director or his or her designee may obtain the signature of the person responsible for the violation to establish personal service of the citation; or

(b) (1) Director or his or her designee shall post the citation by affixing the citation to a surface in a conspicuous place on the property described in Section 12R.18. Conspicuous posting of the citation is not required when personal service is accomplished or when conspicuous posting poses a hardship, risk to personal health or safety or is excessively expensive; and

(2) The Director or his or her designee shall serve the citation by first class mail as follows:

(i) The administrative citation shall be mailed to the person responsible for the violation by first class mail, postage prepaid, with a declaration of service under penalty of perjury; and

(ii) A declaration of service shall be made by the person mailing the administrative citation showing the date and manner of service by mail and reciting the name and address of the person to whom the citation is issued; and

(iii) Service of the administrative citation by mail in the manner described above shall be effective on the date of mailing.

(Added by Ord. 205-06, File No. 060247, App. 7/25/2006)

SEC. 12R.20. ADMINISTRATIVE CITATION; CONTENTS.

The administrative citation under Section 12R.16 shall include all the following:

(1) A description of the violation;

(2) The date and location of the violation(s) observed;

(3) A citation to the provisions of law violated;

(4) A description of corrective action required;

(5) A statement explaining that each day of a continuing violation may constitute a new and separate violation;

(6) The amount of administrative penalty imposed for the violation(s);

(7) A statement informing the violator that the fine shall be paid to the City and County of San Francisco within thirty (30) days from the date on the administrative citation, the procedure for payment, and the consequences of failure to pay;

(8) A description of the process for appealing the citation, including the deadline for filing such an appeal; and

(9) The name and signature of the Director.

(Added by Ord. 205-06, File No. 060247, App. 7/25/2006)

SEC. 12R.21. ADMINISTRATIVE APPEAL.

(a) **Period of Limitation for Appeal.** Persons receiving an administrative citation may appeal it within fifteen (15) days from the date the citation is served. The appeal must be in writing and must indicate a return address. It must be accompanied by the penalty amount, specifying the basis for the appeal in detail, and must be filed with both the Office of Labor Standards Enforcement and the Controller's Office as indicated in the administrative citation.

(b) **Hearing Date.** As soon as practicable after receiving the written notice of appeal and the penalty amount, the Controller or his or her designee shall promptly select a hearing officer (who shall not be an employed in the Office of Labor Standards Enforcement) to hear and decide the administrative appeal. The hearing officer shall fix a date, time and place for the hearing on the appeal. Written notice of the time and place for the hearing may be served by first class mail, at the return address indicated on the written appeal. Service of the notice must be made at least ten (10) days prior to the date of the hearing to the person appealing the citation. The hearing shall be held no later than thirty (30) days after service of the notice of hearing, unless that time is extended by mutual agreement of the parties.

(c) **Notice.** Except as otherwise provided by law, the failure of any person with an interest in property affected by the administrative citation, or other person responsible for a violation, to receive a properly addressed notice of the hearing shall not affect the validity of any proceedings under this Chapter. Service by first class mail, postage prepaid, shall be effective on the date of mailing.

(d) **Failure to Appeal.** Failure of any person to file an appeal in accordance with the provisions of this Section or to appear at the hearing shall constitute a failure to exhaust administrative remedies and a forfeiture of the penalty amount previously remitted.

(e) **Submittals for the Hearing.** No later than five (5) days prior to the hearing, the person to whom the citation was issued and the Office of Labor Standards Enforcement shall submit to the hearing officer, with simultaneous service on the opposing party, written information including, but not limited to, the following: the statement of issues to be determined by the hearing officer and a statement of the evidence to be offered and the witnesses to be presented at the hearing.

(f) **Conduct of Hearing.** The hearing officer appointed by the Controller or the Controller's designee shall conduct all appeal hearings under this Chapter. The Office of Labor Standards Enforcement shall have the burden of proof in such hearings. The hearing officer may accept evidence on which persons would commonly rely in the conduct of their serious business affairs, including but not limited to the following:

(1) A valid citation shall be prima facie evidence of the violation;

(2) The hearing officer may accept testimony by declaration under penalty of perjury relating to the violation and the appropriate means of correcting the violation;

(3) The person responsible for the violation, or any other interested person, may present testimony or evidence concerning the violation and the means and time frame for correction.

The hearing shall be open to the public and shall be tape-recorded. Any party to the hearing may, at his or her own expense, cause the hearing to be recorded and transcribed by a certified court reporter. The hearing officer may continue the hearing and request additional information from the Office of Labor Standards Enforcement or the appellant prior to issuing a written decision.

(g) **Hearing Officer's Decision; Findings.** The hearing officer shall make findings based an the record of the hearing and issue a decision based on such findings within fifteen (15) days of conclusion of the hearing. The hearing officer's decision may uphold the issuance of a citation and penalties stated therein, may dismiss a citation, or may uphold the issuance of the citation but reduce, waive or conditionally reduce or waive the penalties stated in a citation or any late fees assessed if mitigating circumstances are shown and the hearing of officer finds specific grounds for reduction or waiver in the evidence presented at the hearing. The hearing officer may impose conditions and deadlines for the correction of violations or the payment of outstanding civil penalties. Copies of the findings and decision shall be served upon the appellant and the Office of Labor Standards Enforcement by certified mail.

(h) **Hearing Officer's Decision.** The decision of the hearing officer is final. If the hearing officer concludes that the violation charged in the citation did not occur or that the person charged in the citation was not the responsible party, the Office of Labor Standards Enforcement shall refund or cause to be refunded the penalty amount to the person who deposited such amount. The hearing officer's decision shall be served on the appellant by certified mail.

(Added by Ord. 205-06, File No. 060247, App. 7/25/2006)

SEC. 12R.22. REGULATIONS.

The Office of Labor Standards Enforcement may promulgate and enforce rules and regulations, and issue determinations and interpretations relating to the administrative penalty and citation system pursuant to Sections 12R.16 through 12R.20, inclusive. The Controller may promulgate and enforce rules and regulations, and issue determinations and interpretations relating to the conduct of administrative appeals under Section 12R.21. Any rules and regulations promulgated by the Office of Labor Standards Enforcement or Controller shall be approved as to legal form by the City Attorney, and shall be subject to not less than one noticed public hearing. The rules and regulations shall become effective 30 days after receipt by the Clerk of the Board of Supervisors, unless the Board of Supervisors by resolution disapproves or modifies the regulations. The Board of Supervisors' determination to modify or disapprove a rule or regulation submitted by the Office of Labor Standards Enforcement or Controller shall not impair the ability of the Office of Labor Standards Enforcement or Controller to resubmit the same or similar rule or regulation directly to the Board of Supervisors if the Office of Labor Standards Enforcement or Controller determines it is necessary to effectuate the purposes of this Chapter.

(Added by Ord. 205-06, File No. 060247, App. 7/25/2006)

SEC. 12R.23. JUDICIAL REVIEW.

(a) **Procedures.** After receipt of the decision of the hearing officer under Section 12R.21, the appellant may file an appeal with the superior court pursuant to California Government Code Section 53069.4. The appeal shall be submitted within twenty (20) days of the date of mailing of the hearing officer's decision, with the applicable filing fee. The appeal shall state the reasons the appellant objects to the findings or decision.

(b) **Review.** The superior court shall conduct a de novo hearing, except that the contents of the Office of Labor Standards Enforcement's file (excluding attorney client communications and other privileged or confidential documents and materials that are not discoverable or may be excluded from evidence in judicial proceedings under the Evidence Code, Civil Code, Code of Civil Procedure or other applicable law) shall be received into evidence. A copy of the notice of violation and imposition of penalty shall be entered as prima facie evidence of the facts stated therein.

(c) **Filing Fee.** The superior court filing fee shall be twenty-five ($25.00). If the court finds in favor of the appellant, the amount of the fee shall be reimbursed to the appellant by the City and County of San Francisco. Any deposit of penalty shall be refunded by the City and County of San Francisco in accordance with the judgment of the court.

(Added by Ord. 205-06, File No. 060247, App. 7/25/2006)

SEC. 12R.24. OTHER REMEDIES NOT AFFECTED.

The administrative citation procedures established in this Chapter shall be in addition to any other criminal, civil, or other remedy established by law which may be pursued to address violations of this Chapter. An administrative citation issued pursuant to this Chapter shall not prejudice or adversely affect any other action, civil or criminal, that may be brought to abate a violation or to seek compensation for damages suffered.

(Added by Ord. 205-06, File No. 060247, App. 7/25/2006)

SEC. 12R.25. OUTREACH.

The Office of Labor Standards Enforcement shall establish a community-based outreach program to conduct education and outreach to employees. In partnership with organizations involved in the community-based outreach program, the Office of Labor Standards shall create outreach materials that are designed for workers in particular industries.

(Added by Ord. 205-06, File No. 060247, App. 7/25/2006; amended by Ord. 175-11, File No. 110594, App. 9/16/2011, Eff. 10/16/2011)

SEC. 12R.26. REPORTS.

The Office of Labor Standards Enforcement shall provide annual reports to the Board of Supervisors on the implementation of the Minimum Wage Ordinance.

(Added by Ord. 205-06, File No. 060247, App. 7/25/2006)

ATTACHMENT E
GHG Report

Prepared for
Reservoir Community Partners, LLC
San Francisco, CA

Prepared by
Ramboll US Corporation
San Francisco, CA

Date
May 2019

AB900 GREENHOUSE GAS EMISSIONS TECHNICAL ANALYSIS

BALBOA RESERVOIR
SAN FRANCISCO, CALIFORNIA

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ACC	Advanced Clean Cars
ATCM	Airborne Toxics Control Measure
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CH4	methane
CO2	carbon dioxide
GHG	greenhouse gas
GWP	global warming potentials
lb	pound

MT	metric tons
MWh	megawatt hour
N2O	nitrous oxide
PG&E	Pacific Gas and Electric
PRC	Public Resources Code
RPS	Renewables Portfolio Standard
TDM	Transportation Demand Management

1. INTRODUCTION

The mixed-use development project located at the Balboa Reservoir site in the West of Twin Peaks area of San Francisco, California (herein referred to as the "Proposed Project" or "Project") has applied for California Environmental Quality Act (CEQA) judicial streamlining under Public Resources Code (PRC) Section 21178 et seq. The Application also addresses a variant to the Proposed Project that includes additional residences and a lower parking capacity (hereinafter referred to as the "Project Variant"). In support of the Application, Ramboll US Corporation (Ramboll) quantified both direct and indirect greenhouse gas (GHG) emissions associated with the Proposed Project's and Project Variant's operation, including ongoing emissions reductions associated with transportation and building energy usage, to show the Project and Project Variant meet the requirement for no "net additional emission of greenhouse gases [GHG], including greenhouse gas emissions from employee transportation" [California PRC §21183(c)].

Throughout this report, GHG emissions are reported in units of metric tons of carbon dioxide equivalents (MT CO_2e). Carbon dioxide equivalents are emissions of carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), weighted by the global warming potentials (GWP) from Title 40 of the Code of Federal Regulations (CFR), Part 98, Table A-1, as referenced by the California Mandatory Reporting Rule for GHG (Title 17 of the California Code of Regulations, §§95100- 95158). GHG emissions are quantified for this Project, including both construction and operational emissions. This document summarizes the assumptions and calculation methodologies Ramboll used to estimate GHG emissions. Summary tables are provided in the text, while more detailed calculation tables are provided in **Appendix A**.

1.1 Project Description

1.1.1 Existing Conditions

The Site is an approximately 17.6-acre parcel currently operating as a parking lot. Unenclosed parking lot operational emissions are generally limited to just lighting electricity. Therefore, existing operational emissions were assumed to be negligible and were not evaluated in this analysis.

1.1.2 Proposed Project

The Proposed Project would be a mixed-use development with predominantly residential uses and a mix of open space, retail, and childcare. The Proposed Project would include development of 1,100 residential units, 7,500 gross square feet of retail uses, 10,000 gross square feet of childcare uses, 1,300 parking spaces, and 4 acres of open space.

Land uses for the Proposed Project are shown in **Table 1.**

1.1.3 Proposed Project Variant

Under the Project Variant, an additional 450 residential units would be included in the Project design. The Project parking capacity would be reduced to 650 spaces, and all other land uses would remain equal to the Proposed Project.

Land uses for the Proposed Project Variant are shown in **Table 1.**

Table 1: Land Use Summary for Project and Project Variant

Land Use	Units	Project	Project Variant
Apartments (categorized as Mid Rise)	Dwelling Units	1,000	1,450
Townhouses	Dwelling Units	100	100
Retail	Square Feet	7,500	7,500
Childcare Center	Square Feet	10,000	10,000
Parking Garage	Spaces	1,300	650
Open Space	Acres	4.0	4.0

2. CONSTRUCTION GHG EMISSIONS

Construction of the Proposed Project and Project Variant will generate "one-time" emissions; discrete emissions that are not associated with ongoing Project/Project Variant operation. These emissions are quantified and disclosed for the Proposed Project and Project Variant. Methodologies for quantifying construction GHG emissions are detailed in the following sections.

2.1 Construction Phasing

The Proposed Project and Project Variant, whichever is selected as the preferred option, would be constructed in two overlapping development phases with full buildout expected to occur in 2027. This analysis is based on an approximately six-year construction duration and two-phase program that would constitute maximum development on the site.

This analysis conservatively assumes that the residential buildings constructed in each phase of the construction program would be occupied and fully operational as soon as construction of a phase is completed. This is conservative because occupancy and operation of each phase would likely ramp up over time after construction of the building is complete.

The preliminary construction schedule assumes that construction would start in 2021, that it would last approximately six years, and that it would take place for five days per week with different equipment operating for different hours. **Table 2** shows a summary of the expected construction phasing timeline, provided by the Project Sponsor. The construction phasing is the same for the Project and Project Variant. **Table 3** shows land uses by phase for the Project and Project Variant.

Table 2: Construction and Operation Timeline

Phase	Construction				Operation
	Phase Name	Start Date	End Date	Total Number of Work Days	Start Date
1	Phase 1	3/1/2021	8/31/2024	1,279	9/1/2024
2	Phase 2	9/1/2024	1/31/2027	882	2/1/2027
			TOTAL	**2,161**	

Source: ESA, 2019.

Table 3: Project Land Use by Construction Phase

Land Use	Size Units	Phase 1	Phase 2	Total
Proposed Project				
Apartments Mid Rise	Dwelling Units	545	455	1,000
Condo/Townhouse	Dwelling Units	100	0	100
General Retail	Thousand Square Feet	7.5	0	7.5

Day-Care Center	Thousand Square Feet	0	10	10
Enclosed Parking with Elevator	Spaces	550	750	1,300
City Park	Acres	4.0	0	0
Proposed Project Variant				
Apartments Mid Rise	Dwelling Units	750	700	1,450
Condo/Townhouse	Dwelling Units	100	0	100
General Retail	Thousand Square Feet	7.5	0	7.5
Day-Care Center	Thousand Square Feet	0	10	10
Enclosed Parking with Elevator	Spaces	650	0	650
City Park	Acres	4.0	0	4.0

2.2 Construction-Related GHG Emissions

Construction emissions include emissions from both off-road construction equipment (diesel and electric powered) and on-road construction vehicles, including haul trucks, deliveries, and vendor trips. Construction emissions were estimated for both the Project and Project Variant.

2.2.1 Emissions from Diesel Fueled Construction Equipment

GHG emissions from off-road construction equipment and on-road trucks are estimated using the California Emissions Estimator Model (CalEEMod®) version 2016.3.2. CalEEMod® outputs are shown in **Appendix B**, which shows the equipment list and list of on-road vehicles for both the Project and Project Variant.

2.2.2 Emissions from Electric Construction Equipment

GHG emissions from the use of electrical off-road equipment are estimated based on type and usage of each equipment. Cranes and aerial lifts are assumed to be electric. Crane and aerial lift usage are assumed to be the same for the Project and Project Variant. **Table A.1** in **Appendix A** shows the yearly electricity consumption by construction equipment and GHG emission by year. Yearly GHG emissions were calculated by multiplying the CO_2e intensity factor with the scaled electricity consumption for each year.

2.3 Summary of Construction GHG Emissions

The total emissions from construction are summarized in **Table 4**. Total GHG emissions from construction activities would be 13,673 MT CO_2e for the Proposed Project and 17,574 MT CO_2e for the Project Variant.

Table 4: Construction GHG Emissions (MT/year)

Year	Electric Equipment	Diesel Off-Road Equipment and On-Road Trucks		Total GHG Emissions	
	Project and Variant	Project	Variant	Project	Variant
2021	0	1,611	1,611	1,611	1,611
2022	17.1	2,645	3,535	2,662	3,552
2023	59.5	2,366	3,157	2,426	3,217
2024	30.4	2,950	3,538	2,981	3,568
2025	51.6	2,031	2,832	2,083	2,884
2026	47.6	1,734	2,504	1,781	2,552
2027	3.0	127	187	130	190
Total GHG emissions from construction (MT)				**13,673**	**17,574**

3. OPERATIONAL GHG EMISSIONS

GHG emissions are quantified using the California Air Resources Board's current approved model, CalEEMod® version 2016.3.2. CalEEMod® was utilized for the Proposed Project (by phase) and Project Variant (by phase). Emissions categories include on-road vehicle exhaust (mobile), stationary sources within the project site (generators), energy (indirect emissions from electricity and direct emissions from natural gas), water and wastewater, solid waste disposal and area sources such as landscaping equipment. CalEEMod assumptions are shown in **Table A.2** of **Appendix A**.

3.1 GHG Emissions from Existing Conditions

Total GHG emissions from operation of the existing site were not evaluated for this analysis. Parking lots are associated with low GHG emissions, primarily limited to lighting electricity use. Baseline operational emissions for the Project were considered negligible.

3.2 GHG Emissions from Proposed Project and Project Variant

Project GHG emissions at the first full year of buildout (2027) would be 3,301MT CO_2e/year, with mobile sources being the largest contributor to GHG emissions, followed by electricity and natural gas.

Project Variant GHG emissions at the first full year of buildout (2027) would be 4,186 MT CO_2e/year, with mobile sources being the largest contributor to GHG emissions, followed by electricity and natural gas.

An emissions summary at the full buildout year is shown in **Table 5**. Total GHG emissions from operation of the Proposed Project and Project Variant from 2021 to 2056 are shown in **Table 6**.

To calculate emissions, CalEEMod® was run for the buildout year of each phase, with adjustments from defaults described below. Emissions for the lifetime of the building, assumed to be 30 years, are estimated as described below. Emissions from electricity decrease with time due to the reduction in carbon intensity from the grid and emissions from vehicle travel decrease with time due to the turnover of the vehicle fleet. CalEEMod® outputs and detailed calculations for the Proposed Project and Project Variant are presented in **Appendix B** and **Tables A.2 through A.8** of **Appendix A**.

3.2.1 Mobile

CalEEMod® estimates mobile GHG emissions from running, idling, and starting exhaust for the aggregated projected vehicle fleet in a given calendar year and county. Trip rates for the land use sub-types are estimated using the estimated trip counts from AB900 Transportation Assessment from Kittelson & Associates,[1] as shown in **Table A.3** of **Appendix A**. These trip rates take into account the project specific Transportation Demand Management (TDM) program. The Project's TDM includes the following measures, which are discussed more in the Transportation Assessment memo:

- Improve Biking/Walking Network
- Provide Bicycle Parking

[1] Kittelson & Associates. 2019. AB 900 Transportation Assessment-Final –. May 14.

- Implement Car Share Program
- Unbundle Parking
- Limit On-Site Parking Supply
- Improved Design of Development

The Travel Demand Memorandum[2] for the Project also provided service vehicle trips. These trips were added to the passenger trips associated with each land use.

The fleet mix for the passenger trips presented in the AB 900 Transportation Assessment were assumed be all passenger vehicles (LDA, LDT1, and LDT2), scaled based off CalEEMod default fleet mix. Fleet mix for the service vehicle trips were assumed to be 25% passenger vehicles and 75% trucks (MDV, LHD2, MHD, and HHD). Emissions from the service vehicle trips were estimated using user defined land use to take into account the specific fleet mix. Trip rates are shown in **Table A.3** of **Appendix A**.

Trip lengths and trip types are default values from CalEEMod®. Vehicle emission factors were updated for CalEEMod® to be consistent with EMFAC2017.

Fleet-average emission factors through 2050 were calculated using EMFAC2017, and mobile emissions from the Proposed Project were adjusted to reflect the emission factors each year. The fleet-average mobile emission factors decrease over time due to fleet turnover and regulations such as Advanced Clean Cars (ACC). **Table A.5** of **Appendix A** summarizes the fleet-average mobile CO_2e emission factors and percent change that was used in the yearly analysis.

3.2.2 Energy

Energy emissions include indirect emissions from electricity used by buildings and direct natural gas combustion emissions.

Indirect GHG emissions, which occur when electricity is used, are typically due to electricity generation from offsite power plant locations.

GHG emissions from natural gas combustion are generated from commercial usage (e.g., cooking and heating) and industrial usage (e.g., boilers). CalEEMod® default emission factors are used.

Energy emissions for the Proposed Project and Project Variant reflect buildings constructed to 2019 Title 24 Building Energy Efficiency Standards and incorporate conservation measures such as increased lighting efficiencies. Annual energy use totals for the Proposed Project and Project Variant were based on CalEEMod default assumptions for the given land uses in San Francisco County with an additional 10% reduction in lighting electricity, consistent with 2019 Title 24.

3.2.2.1 Electricity

Electrical power is supplied to the study area by Pacific Gas and Electric (PG&E). To estimate emissions, the estimated electricity usage of the Project and Project Variant is multiplied by the carbon intensity of the electrical grid. Carbon intensities of electricity are GHG emission rates from a given source in terms of the amount of GHG released in pounds (lbs) per

[2] Kittelson & Associates. 2019. Travel Demand Memorandum – Final. January 14.

megawatt hour (MWh) of energy produced and are different depending on the source of electricity.

The average carbon intensity of electricity use change over time due to the California Renewables Portfolio Standard (RPS), a program designed to meet statewide GHG reduction targets. The RPS requires 33% of electricity supplied by utilities to come from renewable sources by 2020. The RPS was recently expanded with SB100 to require 60% of electricity to be from renewable sources in 2030 and to be 100% renewable by 2045. [3]

Ramboll used emission factors and renewables percentages for 2014 through 2016 from PG&E to project future electricity intensity based on the State achieving the RPS standards. We understand the Project may obtain electricity from CleanPowerSF, which tends to supply more renewable electricity than PG&E. However, to be conservative, electricity from PG&E is assumed here. The default electricity intensity for CH_4 and N_2O were obtained from CalEEMod® Appendix D (using PG&E values) and were conservatively not adjusted for future inventory years. This calculation is shown in **Table A.4** of **Appendix A**.

Indirect electricity emissions for the Proposed Project and Project Variant are estimated in CalEEMod, using the estimated carbon intensity for the buildout year of each phase.

To account for the reduction in carbon intensity for future years, a relative reduction in carbon intensity for each year was calculated, as shown in **Table A.5** of **Appendix A**.

3.2.2.2 Natural Gas

GHG emissions from natural gas combustion are generated from residential usage, commercial usage (e.g., cooking and heating) and industrial usage. Energy usage rates reflect CalEEMod default assumptions with applicable 2019 Title 24 and energy conservation measures.

Energy use is estimated by phase and calendar year based CalEEMod default assumptions, with maximum energy use at full buildout.

CalEEMod® default emission factors are used.

3.2.3 Water and Wastewater

Indirect GHG emissions result from the electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of the water. Water for the Project and Project Variant is estimated using CalEEMod® default assumptions. Indirect emissions from electricity to supply, treat, and distribute water decrease over time as the carbon intensity of electricity decreases.

Additional emissions from wastewater treatment include CH_4 and N_2O, which are emitted directly from the wastewater.

Water use rates are based on CalEEMod® defaults for San Francisco County.

3.2.4 Solid Waste Disposal

Emissions from the transport and processing of solid waste are calculated using solid waste generation rates from CalEEMod® for San Francisco County. Indirect GHG emissions

[3] SB-100 California Renewables Portfolio Standard Program: emissions of greenhouse gases. Sep 2018. Available at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100

associated with waste disposal include CH_4 generation from the decomposition of waste and the CO_2 emissions associated with the combustion of CH_4, if applicable. GHG emissions associated with non-landfill diverted waste streams are not considered, because it is generally assumed that these diversions do not result in any appreciable amounts of GHG emissions when operated effectively. These waste diversion alternatives may result in differences in life-cycle emissions of GHGs, but it is not appropriate to combine life-cycle emissions for only one category of emissions.

Biogenic CO_2 emissions were not included when the California Air Resources Board (CARB) analyzed the GHG emissions inventory under Assembly Bill (AB) 32. Therefore, they are not included in the emissions inventory.

3.2.5 Area

GHG emissions from area sources, such as hearths and landscaping equipment, were estimated using CalEEMod® based on the type and size of land uses associated with the Proposed Project and Project Variant.

3.2.6 Back-Up Generator

Operation of standby emergency engines will result in direct emissions of GHGs. The Proposed Project includes the installation of two 300 kilowatt (kW) diesel generators, and the Project Variant includes the installation of six 300 kW generators. Emissions are calculated in CalEEMod assuming the engine would be Tier 2 with a limit of 50 hours of operation for routine maintenance and testing. This is consistent with the maximum allowed testing time from the Airborne Toxics Control Measure (ATCM) for Stationary Compression Ignition Engines (17 CCR 93115) for a Tier 2 engine.

3.2.7 Vegetation Changes

The Project and Project Variant replace a paved parking area with buildings and vegetation. The Project and Project Variant propose to increase trees and grassland, which sequester GHG emissions over their lifetime. Emissions were calculated consistent with CalEEMod methods, assuming all trees fall within the CalEEMod “miscellaneous” category. Emissions calculations are shown in **Table A.6** of **Appendix A**.

3.2.8 Existing Trip Reduction

The Proposed Project and Project Variant replace an existing parking lot for the City College, which is expected to reduce trips to the college by encouraging more students to take other modes of transport. This reduction in trips to the City College were estimated in the AB900 Transportation Demand Management Program. The associated reduction in emissions were estimated in CalEEMod, using default assumptions for a junior college, as discussed in **Table A.7** of **Appendix A** and **Appendix B**.

3.3 Summary of Operational GHG Emissions

Project and Project Variant operational emissions for full buildout are shown in **Table 5** and **Table A.8** of **Appendix A**.

3.4 Overall Year-by-Year Emissions

The year-by-year summary comparison of the Proposed Project and Project Variant is shown in **Table 6.** Emissions were evaluated over a 30-year period for each phase individually, with each 30-year period beginning with first occupancy. Project construction emissions were also included, separate from the 30-year Phase timelines. Year-by-year emissions for each phase

were based on the initial operational year and adjusted to account for annual mobile vehicle fleet improvements and electricity grid RPS adjustments.

Detailed yearly GHG emissions for construction and concurrent operations for the Project and Project Variant are presented in **Tables A.9** and **A.10** of **Appendix A**. Project and Project Variant emissions would exceed existing condition emissions for all years considered.

Total construction emissions would be 13,673 MT for the Project and 17,574 for the Project Variant. Total gross operational emissions would be 74,823 MT for the Project and 90,882 MT for the Project Variant.

Table 5: Project and Project Variant Operational Emissions for Full Build Out Year (2027)

Category	Project CO_2e Emissions (MT)	Project Variant CO_2e Emissions (MT)
Area	28	34
Electricity	879	936
Natural Gas	581	785
Mobile	1,379	1,796
Solid Waste	265	369
Water and Wastewater	167	233
Stationary Sources	15	46
Vegetation Reduction	-13	-13
Total	3,301	4,186

Table 6: Year-by-Year Comparison of GHG Emissions (MT/yr)

Year	Proposed Project		Proposed Project Variant	
	Construction	Operation	Construction	Operation
2021	1,611	--	1,611	--
2022	2,662	--	3,552	--
2023	2,426	--	3,217	--
2024	2,981	2,003	3,568	2,295
2025	2,083	1,950	2,884	2,228
2026	1,781	1,900	2,552	2,166
2027	130	3,217	190	3,864
2028	--	3,134	--	3,767
2029	--	3,054	--	3,674
2030	--	2,979	--	3,587
2031	--	2,906	--	3,503
2032	--	2,835	--	3,422
2033	--	2,767	--	3,344
2034	--	2,701	--	3,270
2035	--	2,637	--	3,197
2036	--	2,574	--	3,127
2037	--	2,513	--	3,059
2038	--	2,454	--	2,992
2039	--	2,395	--	2,928
2040	--	2,338	--	2,864
2041	--	2,282	--	2,802
2042	--	2,226	--	2,740
2043	--	2,171	--	2,680
2044	--	2,116	--	2,620
2045	--	2,062	--	2,561
2046	--	2,060	--	2,558
2047	--	2,071	--	2,568
2048	--	2,069	--	2,566
2049	--	2,068	--	2,564
2050	--	2,067	--	2,563
2051	--	2,067	--	2,563
2052	--	2,067	--	2,563
2053	--	2,067	--	2,563
2054	--	769	--	921
2055	--	769	--	921
2056	--	769	--	921
2057	--	769	--	921

Total Gross Emissions (MT)	13,673	74,823	17,574	90,882

4. MEASURES FOR OFFSETTING NET INCREASE GHG EMISSIONS

To offset the increase in GHG emissions from construction in 2021 through 2026 and from operation in 2024 through 2056, the Project Sponsor commits to measures to ensure there will be no net additional GHG emissions associated with the Project or Project Variant.

The emissions calculations shown in Section 3 incorporate many of the voluntary measures incorporated into the Project and the Project Variant to reduce GHG emissions. These include the comprehensive TDM program, designing energy efficient buildings, and increasing the vegetation of the area. The Project and Project Variant would also include many other features that would reduce GHGs, whose reductions are not explicitly quantified herein because details on the measures are not known at this time. Emissions could be reduced further through on-site mitigation measures such as installing additional solar panels or electric vehicle charging stations.

The Project Sponsor will purchase qualified GHG credits for any increase in emissions due to construction.

For operational emissions, the Project Sponsor will re-quantify emissions before operation of Phase 1 to evaluate any additional GHG reduction measures incorporated into the Project since this assessment. The Project Sponsor will purchase qualified GHG credits for any increase in emissions based on this emissions analysis. The Project Sponsor may also purchase qualified GHG credits for any increase in emissions based on the emissions analysis in this report before operation of Phase 1.

The commitments to enter into contracts to offset net additional GHG emissions will be incorporated into the Project's Mitigation Monitoring and Reporting Program (MMRP) and all improvement measures will be enforceable through the MMRP, which represents a binding and enforceable agreement between the Project Sponsor and the lead agency (City of San Francisco).

APPENDIX A
CONSTRUCTION AND OPERATION SUPPORTING TABLES

Table A.1
Emissions from Electric Construction Equipment
Balboa Reservoir AB900
San Francisco, California

Phase	Equipment[1]	Quantity	Daily Usage	Power	Load Factor	Start Date	End Date	Daily Electricity Use[2]	Days per Year[3]					
			hours/day	hp				hp-hr/day	2022	2023	2024	2025	2026	2027
Phase 1	Cranes	2	8	231	0.29	10/1/2022	8/31/2024	1,072	65	260	175	--	--	--
Phase 1	Cranes	1	8	231	0.29	10/1/2022	10/31/2023	536	65	217	--	--	--	--
Phase 1	Cranes	1	8	231	0.29	9/1/2022	8/31/2024	536	87	260	175	--	--	--
Phase 1	Aerial Lifts	1	8	63	0.31	7/1/2023	11/30/2023	156	--	109	--	--	--	--
Phase 1	Aerial Lifts	1	8	63	0.31	7/1/2024	8/31/2024	156	--	--	45	--	--	--
Phase 2	Aerial Lifts	1	8	63	0.31	9/1/2024	10/25/2024	156	--	--	47	--	--	--
Phase 2	Cranes	3	8	231	0.29	4/1/2025	1/31/2027	1,608	--	--	--	197	261	21
Phase 2	Cranes	2	8	231	0.29	4/1/2025	4/30/2026	1,072	--	--	--	197	86	--
Annual Electricity Usage[4]								hp-hr/year	151,129	551,342	295,732	527,881	511,804	33,763
								MWh/year	113	411	221	394	382	25
Carbon Intensity[5]								lb/MWh	334	319	304	289	275	261
CO_2e Emissions[6]								**MT/year**	**17**	**60**	**30**	**52**	**48**	**3.0**

Notes:

1. Equipment usage for each time period provided by the Project Sponsor.
2. Daily Electricity Use is the product of quantity, daily usage, power and load factor.
3. Days per year are the working days of each year based on the start and end date.
4. Electricity usage is the product of the days per year and daily electricity usage for each year.
5. Carbon Intensity consistent with Table A.5.
6. CO_2e Emissions is the product of the electricity usage and carbon intensity.

Abbreviations:

hp - horsepower
hr - hour
lb - pounds
MT - metric tonnes
MWh - megawatt hour

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Table A.2
Project Characteristics
Balboa Reservoir AB900
San Francisco, California

Project Name	**Balboa Reservoir, Operational: Proposed Project / Project Variant - Phase 1**	**Balboa Reservoir, Operational: Proposed Project / Project Variant - Phase 2**
Project Location	San Francisco County	San Francisco County
Wind Speed (m/s)	4.6	4.6
Precipitation Frequency	64	64
Climate Zone	5.0	5.0
Land Use Setting	Urban	Urban
Operational Year	2024	2027
Utility Company	Pacific Gas & Electric	Pacific Gas & Electric
CO_2 Intensity Factor[1] (lb/MWh)	301	258
CH_4 Intensity Factor (lb/MWh)	0.029	0.029
N_2O Intensity Factor (lb/MWh)	6.0E-03	6.0E-03
CO2e Intensity Factor (lb/MWh)	304	261

Notes:

1. Derivation for annual grid electricity carbon intensity factors is presented in Table 5.

Abbreviations:

CH_4 - methane
CO_2 - carbon dioxide
CO2e - carbon dioxide equivalent
lb - pound
m/s - meters per second
MWh - megawatt-hour
N_2O - nitrous oxide

Table A.3
Operational Trip Rates
Balboa Reservoir AB900
San Francisco, California

Land Use Sub-Type	Size Metric	Size	Vehicle Trips[1]	Trip Rate[2]	Service Vehicle Trips[3] (Phase 1)	Service Vehicle Trips[3] (Phase 2)
			(trips/day)	(trip/size/day)	(trips/day)	(trips/day)
Proposed Project						
Residential	Dwelling Unit	1,100	2,041	1.86	23	16
Retail	ksf	7.5	285	38	1.7	0
Daycare	ksf	10	71	7.1	0	1.0
Total Vehicle Trips	--	--	2,397	--	24	17
Proposed Project Variant						
Residential	Dwelling Unit	1,550	2,751	1.77	25	21
Retail	ksf	7.5	285	38	1.7	0
Daycare	ksf	10	71	7.1	0	1.0
Total Vehicle Trips	--		3,107	--	27	22

Notes:

[1] Project and Variant trip rates from the traffic memorandum (Kittelson & Associates, May 14, 2019). Vehicle Trips are found in Appendix C, in the tables titled "Developer's Proposed Option with TDM Plan" and "Additional Housing Option with TDM Plan".

[2] Trip rate is calculated by dividing the vehicle trips by the landuse size.

[3] Service Vehicle trip rates from Travel Demand Memo and apportioned between Phase 1 and Phase 2 by number of dwelling units.

Abbreviations:

ksf - thousand square feet

Table A.4
Electricity Intensity Factor Derivations
Balboa Reservoir AB900
San Francisco, California

	2014[1,2]	2015[1,3]	2016[1,4]	3-Year Average[5]	Units
CO_2 Intensity Factor per Total Energy Delivered	435	405	294	378	lbs CO_2/MWh delivered
% of Total Energy From Renewables	27%	30%	33%	30%	
CO_2 Intensity Factor per Total Non-Renewable Energy[6]	596	574	437	538	lbs CO_2/MWh delivered
Estimated Intensity Factor for Total Energy Delivered[7,8]					
2020 RPS (33%)	399	384	293	360	lbs CO_2/MWh delivered
	402	387	295	363	lbs CO_2e/MWh delivered
2024 RPS (44%)	334	321	245	301	lbs CO_2/MWh delivered
	336	324	247	304	lbs CO_2e/MWh delivered
2027 RPS (52%)	286	275	210	258	lbs CO_2/MWh delivered
	289	278	212	261	lbs CO_2e/MWh delivered
2030 RPS (60%)[9]	238	230	175	215	lbs CO_2/MWh delivered
	241	232	177	218	lbs CO_2e/MWh delivered
2045 RPS (100%)[9]	0.0	0.0	0.0	0.0	lbs CO_2/MWh delivered
	2.6	2.6	2.6	2.6	lbs CO_2e/MWh delivered

Notes:

[1] Total CO_2 emission factor from The Climate Registry. Available at: https://www.theclimateregistry.org/our-members/cris-public-reports/. Accessed: April 2018.

[2] Percent of total energy from eligible renewables is from the PGE 2015 Corporate Responsibility Report. Available at: http://www.pgecorp.com/corp_responsibility/reports/2015/PGE_CRSR_2015.pdf.

[3] Percent of total energy from eligible renewables is from the PGE 2016 Corporate Responsibility Report. Available at: http://www.pgecorp.com/corp_responsibility/reports/2016/PGE_CRSR_Environment.pdf.

[4] Percent of total energy from eligible renewables is from the PGE 2017 Corporate Responsibility Report. Available at: http://www.pgecorp.com/corp_responsibility/reports/2017/assets/PGE_CRSR_2017_Environment.pdf.

[5] This average uses the most recent three years of data.

[6] The emissions metric presented here is calculated based on the total CO_2 intensity factor divided by the percent of energy delivered from non-renewable sources.

[7] The intensity factor for total energy delivered is estimated by multiplying the percentage of energy delivered from non-renewable energy by the CO_2 emissions per total non-renewable energy metric calculated above. The estimate provided here and the energy reports issued by PGE assume that renewable energy sources do not result in any CO_2

[8] Global Warming Potentials (GWP) are based on the IPCC Fourth Assessment Report. CH_4 and N_2O emission factors are from the CalEEMod version 2016.3.2 defaults for PGE, and are conservatively assumed not to change from these estimates. As more renewable energy is integrated into the electricity grid, these intensity factors will also decrease.

[9] Emission factor presented here is 60% projected RPS for 2030 and 100% carbon-free electricity for 2045 consistent with SB 100. Available at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100.

Abbreviations:

CH_4 - methane
CO_2 - carbon dioxide
GWP - Global Warming Potentials
lbs - pounds
MWh - megawatt-hour
N_2O - nitrous oxide
RPS - Renewable Portfolio Standards
PGE - Pacific Gas & Electric

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Table A.5
Electricity and Moble Emission Factors
Balboa Reservoir AB900
San Francisco, California

Year	CO_2e Intensity Factor	Fleet CO_2e EF	Change in carbon intensity from previous year	Change in Fleet EF from previous year
	lb CO_2e / MWh	metric ton / mi	%	%
2020	363	4.0E-04	--	--
2021	348	3.9E-04	-4.0%	-2.4%
2022	334	3.8E-04	-4.2%	-2.6%
2023	319	3.7E-04	-4.3%	-2.8%
2024	304	3.6E-04	-4.9%	-2.7%
2025	289	3.5E-04	-4.8%	-2.8%
2026	275	3.4E-04	-5.0%	-2.5%
2027	261	3.3E-04	-5.1%	-2.4%
2028	246	3.2E-04	-5.6%	-2.2%
2029	232	3.2E-04	-5.9%	-2.0%
2030	218	3.1E-04	-6.0%	-1.8%
2031	203	3.1E-04	-6.6%	-1.6%
2032	189	3.0E-04	-7.1%	-1.5%
2033	175	3.0E-04	-7.6%	-1.3%
2034	160	3.0E-04	-8.2%	-1.1%
2035	146	2.9E-04	-8.9%	-1.0%
2036	132	2.9E-04	-10%	-0.85%
2037	117	2.9E-04	-11%	-0.74%
2038	103	2.9E-04	-12%	-0.63%
2039	89	2.8E-04	-14%	-0.53%
2040	74	2.8E-04	-16%	-0.44%
2041	60	2.8E-04	-19%	-0.38%
2042	46	2.8E-04	-24%	-0.31%
2043	31	2.8E-04	-31%	-0.26%
2044	17	2.8E-04	-46%	-0.22%
2045	2.6	2.8E-04	-85%	-0.18%
2046	2.6	2.8E-04	0.0%	-0.18%
2047	2.6	2.8E-04	0.0%	-0.18%
2048	2.6	2.8E-04	0.0%	-0.16%
2049	2.6	2.8E-04	0.0%	-0.12%
2050	2.6	2.8E-04	0.0%	-0.072%
2051	2.6	2.8E-04	0.0%	0.0%
2052	2.6	2.8E-04	0.0%	0.0%
2053	2.6	2.8E-04	0.0%	0.0%
2054	2.6	2.8E-04	0.0%	0.0%
2055	2.6	2.8E-04	0.0%	0.0%
2056	2.6	2.8E-04	0.0%	0.0%
2057	2.6	2.8E-04	0.0%	0.0%

Abbreviations:

CO_2e - carbon dioxide equivalents
EF - emission factor
lb - pound
mi - mile
MWh - megawatt-hour

Table A.6
GHG Emissions Sequestration from Vegetation
Balboa Reservoir AB900
San Francisco, California

Number of Net New Trees[1]	Units	Broad Species Class	Annual CO_2 accumulation per tree (MT CO_2/tree/year)[2,3]	Project GHG Sequestration (MT CO_2e)
370	Trees	Miscellaneous	0.035	262

Notes:

1. Number of net new trees from Project Description. Net New Trees = (Total number of trees - number of existing trees)
2. From CalEEMod User's Guide Appendix A.
3. All vegetation types are assumed to have a growing period of 20 years.

Abbreviations:

CO_2 - carbon dioxide

CO_2e - carbon dioxide equivalents

MT - metric tones

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Table A.7
GHG Emission Reductions from Existing Trips
Balboa Reservoir AB900
San Francisco, California

Project Phase	Number of Trips Eliminated[1]	Project Reduction (MT CO_2e)[2]
Phase 1	167	83
Phase 2	644	321

Notes:

1. Project and Variant trip reduction rates from the AB 900 Transportation Assessment (Kittelson & Associates, April 2019).
2. Calculated by CalEEMod using default trip lengths for Junior College, assuming operation only on weekdays.

Abbreviations:

CO_2e - carbon dioxide equivalents

MT - metric tones

Table A.8
Project Emissions
Balboa Reservoir AB900
San Francisco, California

Phase	Year	CO_2e Emissions (MT/yr)[1]									
		Area Sources	Energy		Mobile[2]	Waste	Water[3]		Stationary Source	Vegetation Reduction	Total
			Electricity	Natural Gas			Treatment	Transportation			
Proposed Project											
Phase 1	2024	22	544	366	888	153	58	47	7.7	0.0	2,086
Phase 2	2027	6	412	215	558	112	41	27	7.7	-13	1,365
Total[4]	2027	28	879	581	1,379	265	100	67	15	-13	3,301
Proposed Project Variant											
Phase 1	2024	25	689	459	1,082	201	77	60	23	0.0	2,616
Phase 2	2027	9	344	326	795	168	63	41	23	-13	1,757
Total[4]	2027	34	936	785	1,796	369	140	93	46	-13	4,186

Notes:

[1] Emissions estimated in CalEEMod.

[2] Mobile Emissions for 2027 were estimated using CalEEMod and adjusted from 2024 to 2027 using the fleet average emission factors in Table 6.

[3] Water emissions broken out by treatment and transportation to take into account the decreasing carbon intensity of the electrical grid used for the transportation of the water. Emissions from treatment only were estimated using a carbon intensity of 0 lb/MWh. Transportation emissions were the difference from the total water emissions and the treatment only emissions.

[4] Total emissions are the sum of Phase 1 and Phase 2, adjusted for the calendar year for electricity use, mobile emissions and water transportation emissions.

Abbreviations:

CO_2e - carbon dioxide equivalent
lb - pound
mi - mile
MWh - megawatt-hour
MT - metric ton
yr - year

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Table A.9
Project CO_2e Emissions by Year
Balboa Reservoir AB900
San Francisco, California

Year	CO_2e (MT/yr)[1]											
	Area	Energy		Mobile[2]	Waste	Water[4]		Stationary Source	Construction[5]	Existing Trip Reductions	Vegetation Reduction	Total
		Electricity[2]	Natural Gas			Treatment	Transportation					
2021	--	--	--	--	--	--	--	--	1,611		0	1,611
2022	--	--	--	--	--	--	--	--	2,662		0	2,662
2023	--	--	--	--	--	--	--	--	2,426		0	2,426
2024	22	544	366	888	153	58	47	7.7	2,981	-83	0	4,984
2025	22	518	366	863	153	58	44	7.7	2,083	-83	0	4,032
2026	22	492	366	841	153	58	42	7.7	1,781	-83	0	3,681
2027	28	879	581	1,379	265	100	67	15	130	-83	-13	3,348
2028	28	830	581	1,348	265	100	63	15	--	-83	-13	3,134
2029	28	781	581	1,321	265	100	60	15	--	-83	-13	3,054
2030	28	734	581	1,297	265	100	56	15	--	-83	-13	2,979
2031	28	686	581	1,275	265	100	52	15	--	-83	-13	2,906
2032	28	637	581	1,257	265	100	49	15	--	-83	-13	2,835
2033	28	589	581	1,241	265	100	45	15	--	-83	-13	2,767
2034	28	541	581	1,227	265	100	41	15	--	-83	-13	2,701
2035	28	492	581	1,214	265	100	38	15	--	-83	-13	2,637
2036	28	444	581	1,204	265	100	34	15	--	-83	-13	2,574
2037	28	395	581	1,195	265	100	30	15	--	-83	-13	2,513
2038	28	347	581	1,188	265	100	27	15	--	-83	-13	2,454
2039	28	299	581	1,181	265	100	23	15	--	-83	-13	2,395
2040	28	250	581	1,176	265	100	19	15	--	-83	-13	2,338
2041	28	202	581	1,172	265	100	15	15	--	-83	-13	2,282
2042	28	154	581	1,168	265	100	12	15	--	-83	-13	2,226
2043	28	105	581	1,165	265	100	8	15	--	-83	-13	2,171
2044	28	57	581	1,162	265	100	4	15	--	-83	-13	2,116
2045	28	9	581	1,160	265	100	0.7	15	--	-83	-13	2,062
2046	28	9	581	1,158	265	100	0.7	15	--	-83	-13	2,060
2047	28	9	581	1,156	265	100	0.7	15	--	-83	0	2,071
2048	28	9	581	1,154	265	100	0.7	15	--	-83	0	2,069
2049	28	9	581	1,153	265	100	0.7	15	--	-83	0	2,068
2050	28	9	581	1,152	265	100	0.7	15	--	-83	0	2,067
2051	28	9	581	1,152	265	100	0.7	15	--	-83	0	2,067
2052	28	9	581	1,152	265	100	0.7	15	--	-83	0	2,067
2053	28	9	581	1,152	265	100	0.7	15	--	-83	0	2,067
2054	6	4	215	466	112	41	0.3	7.7	--	-83	0	769
2055	6	4	215	466	112	41	0.3	7.7	--	-83	0	769
2056	6	4	215	466	112	41	0.3	7.7	--	-83	0	769

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Table A.9
Project CO_2e Emissions by Year
Balboa Reservoir AB900
San Francisco, California

Year	CO_2e (MT/yr)[1]											
	Area	Energy		Mobile[2]	Waste	Water[4]		Stationary Source	Construction[5]	Existing Trip Reductions	Vegetation Reduction	Total
		Electricity[2]	Natural Gas			Treatment	Transportation					
2057	6	4	215	466	112	41	0.3	7.7	--	-83	0	769

Notes:

[1] Mobile Emissions decrease in time based on San Francisco fleet-average emission factors as show in Table 6. Assumes no change after 2050, since EMFAC2017 does not project past 2050.

[2] The Carbon Intensity of electricity is assumed to linearly decline between RPS targets shown in Table 6.

[3] Assume all buildings become operational as soon as phase is constructed. The only changes in emissions are due to transportation and electricity becoming cleaner.

[4] Water emissions broken out by treatment and transportation to take into account the decreasing carbon intensity of the electrical grid used for transportation of the water. Emissions from treatment only were estimated using a carbon intensity of 0 lb/MWh. Transportation emissions were the difference from the total water emissions and the treatment only emissions.

[5] Construction Data provided by ESA (E1.1_CalEEMod_Additional_Developer_Unmit.pdf)

Abbreviations:

CO2e - carbon dioxide equivalent
lb - pound
MT - metric tones
MWh - megawatt-hour
yr - year

Table A.10
Project Variant CO_2e Emissions by Year
Balboa Reservoir AB900
San Francisco, California

Year	CO_2e (MT/yr)[1]											
	Area	Energy		Mobile[3]	Waste	Water[4]		Stationary Source	Construction[5]	Existing Trip Reductions	Vegetation Reduction	Total
		Electricity[2]	Natural Gas			Treatment	Transportation					
2021	--	--	--	--	--	--	--	--	1,611	--	--	1,611
2022	--	--	--	--	--	--	--	--	3,552	--	--	3,552
2023	--	--	--	--	--	--	--	--	3,217	--	--	3,217
2024	25	689	459	1,082	201	77	60	23	3,568	-321	--	5,863
2025	25	656	459	1,052	201	77	58	23	2,884	-321	--	5,112
2026	25	623	459	1,025	201	77	55	23	2,552	-321	--	4,718
2027	34	936	785	1,796	369	140	93	46	190	-321	-13	4,054
2028	34	884	785	1,756	369	140	88	46	--	-321	-13	3,767
2029	34	832	785	1,720	369	140	83	46	--	-321	-13	3,674
2030	34	781	785	1,689	369	140	78	46	--	-321	-13	3,587
2031	34	730	785	1,661	369	140	73	46	--	-321	-13	3,503
2032	34	679	785	1,637	369	140	68	46	--	-321	-13	3,422
2033	34	627	785	1,616	369	140	62	46	--	-321	-13	3,344
2034	34	576	785	1,598	369	140	57	46	--	-321	-13	3,270
2035	34	524	785	1,582	369	140	52	46	--	-321	-13	3,197
2036	34	473	785	1,569	369	140	47	46	--	-321	-13	3,127
2037	34	421	785	1,557	369	140	42	46	--	-321	-13	3,059
2038	34	370	785	1,547	369	140	37	46	--	-321	-13	2,992
2039	34	318	785	1,539	369	140	32	46	--	-321	-13	2,928
2040	34	267	785	1,532	369	140	27	46	--	-321	-13	2,864
2041	34	215	785	1,526	369	140	21	46	--	-321	-13	2,802
2042	34	164	785	1,522	369	140	16	46	--	-321	-13	2,740
2043	34	112	785	1,518	369	140	11	46	--	-321	-13	2,680
2044	34	61	785	1,514	369	140	6.0	46	--	-321	-13	2,620
2045	34	9	785	1,512	369	140	0.9	46	--	-321	-13	2,561
2046	34	9	785	1,509	369	140	0.9	46	--	-321	-13	2,558
2047	34	9	785	1,506	369	140	0.9	46	--	-321	0	2,568
2048	34	9	785	1,504	369	140	0.9	46	--	-321	0	2,566
2049	34	9	785	1,502	369	140	0.9	46	--	-321	0	2,564
2050	34	9	785	1,501	369	140	0.9	46	--	-321	0	2,563
2051	34	9	785	1,501	369	140	0.9	46	--	-321	0	2,563
2052	34	9	785	1,501	369	140	0.9	46	--	-321	0	2,563
2053	34	9	785	1,501	369	140	0.9	46	--	-321	0	2,563
2054	9	3	326	665	168	63	0.4	8	--	-321	0	921

Table A.10
Project Variant CO_2e Emissions by Year
Balboa Reservoir AB900
San Francisco, California

Year	CO_2e (MT/yr)[1]											
	Area	Energy		Mobile[3]	Waste	Water[4]		Stationary Source	Construction[5]	Existing Trip Reductions	Vegetation Reduction	Total
		Electricity[2]	Natural Gas			Treatment	Transportation					
2055	9	3	326	665	168	63	0.4	8	--	-321	0	921
2056	9	3	326	665	168	63	0.4	8	--	-321	0	921
2057	9	3	326	665	168	63	0.4	8	--	-321	0	921

Notes:

[1] Mobile Emissions decrease in time based on San Francisco fleet-average emission factors as show in Table 6. Assumes no change after 2050, since EMFAC2017 does not project past 2050.

[2] The Carbon Intensity of electricity is assumed to linearly decline between RPS targets shown in Table 6.

[3] Assume all buildings become operational as soon as phase is constructed. The only changes in emissions are due to transportation and electricity becoming cleaner.

[4] Water emissions broken out by treatment and transportation to take into account the decreasing carbon intensity of the electrical grid used for transportation of the water. Emissions from treatment only were estimated using a carbon intensity of 0 lb/MWh. Transportation emissions were the difference from the total water emissions and the treatment only emissions.

[5] Construction Data provided by ESA (E1.1_CalEEMod_Additional_Developer_Unmit.pdf)

Abbreviations:

CO2e - carbon dioxide equivalent
lb - pound
MT - metric tones
MWh - megawatt-hour
yr - year

APPENDIX B
OPERATIONAL CALEEMOD® OUTPUT FILES

Balboa Reservoir, Operational: Developer Option - Phase 1

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	550.00	Space	4.95	220,000.00	0
User Defined Parking	0.00	User Defined Unit	0.00	0.00	0
City Park	4.00	Acre	4.00	174,240.00	0
Apartments Mid Rise	545.00	Dwelling Unit	14.34	545,000.00	1559
Condo/Townhouse	100.00	Dwelling Unit	6.25	100,000.00	286
Strip Mall	7.50	1000sqft	0.17	7,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	301	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Balboa Reservoir, Operational: Developer Option - Phase 1 - San Francisco County, Annual

Project Characteristics - CO2 Intensity Factor is adjusted to account for RPS decreases.

Land Use - Residential square footage scaled based on total residential gross ksf, consistent with the Project description.

Construction Phase - Construction is evaluated separately.

Off-road Equipment - xxx

Off-road Equipment -

Vehicle Trips - Operational trips based on May 14, 2019 Kittelson & Assoc traffic analysis.

Vehicle Emission Factors - Mobile emission factors updated based on EMFAC2017 for 2024.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumed 100 natural gas fireplaces, per Project Sponsor.

Energy Use - For Apartments and Condos: Assumed 10% electricity and lighting energy reduction, and 4.7% natural gas energy reduction consistent with 2019 Title 24. For all other landuses, assumed 10.7% electricity and lighting energy reduction, and 1% natural gas ener

Operational Off-Road Equipment -

Fleet Mix - Fleet Mix based on Emfac 2017

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	13200	22584
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblEnergyUse	LightingElect	741.44	667.30
tblEnergyUse	LightingElect	1,001.10	900.99
tblEnergyUse	LightingElect	2.63	1.56
tblEnergyUse	LightingElect	5.00	4.36
tblEnergyUse	NT24E	3,277.06	3,054.10
tblEnergyUse	NT24E	4,109.59	3,795.01
tblEnergyUse	T24E	502.89	383.81
tblEnergyUse	T24E	231.62	184.07
tblEnergyUse	T24E	3.92	3.50

tblEnergyUse	T24E	2.35	2.00
tblEnergyUse	T24NG	8,824.58	5,827.60
tblEnergyUse	T24NG	25,448.35	19,159.11
tblEnergyUse	T24NG	3.92	3.96
tblFireplaces	NumberGas	81.75	0.00
tblFireplaces	NumberGas	15.00	100.00
tblFireplaces	NumberNoFireplace	21.80	545.00
tblFireplaces	NumberNoFireplace	4.00	0.00
tblFireplaces	NumberWood	92.65	0.00
tblFireplaces	NumberWood	17.00	0.00
tblFleetMix	FleetMixLandUseSubType	Enclosed Parking with Elevator	Apartments Mid Rise
tblFleetMix	FleetMixLandUseSubType	User Defined Parking	City Park
tblFleetMix	FleetMixLandUseSubType	City Park	Condo/Townhouse
tblFleetMix	FleetMixLandUseSubType	Apartments Mid Rise	Enclosed Parking with Elevator
tblFleetMix	FleetMixLandUseSubType	Condo/Townhouse	Strip Mall
tblFleetMix	FleetMixLandUseSubType	Strip Mall	User Defined Parking
tblFleetMix	HHD	9.2570e-003	0.00
tblFleetMix	HHD	9.2570e-003	0.00
tblFleetMix	HHD	9.2570e-003	0.00
tblFleetMix	HHD	9.2570e-003	0.00
tblFleetMix	HHD	9.2570e-003	0.00
tblFleetMix	HHD	9.2570e-003	0.05
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.72

tblFleetMix	LDA	0.60	0.18
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.02
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.04
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD2	5.0770e-003	0.00
tblFleetMix	LHD2	5.0770e-003	0.00
tblFleetMix	LHD2	5.0770e-003	0.00
tblFleetMix	LHD2	5.0770e-003	0.00
tblFleetMix	LHD2	5.0770e-003	0.00
tblFleetMix	LHD2	5.0770e-003	0.09
tblFleetMix	MCY	6.2620e-003	0.00
tblFleetMix	MCY	6.2620e-003	0.00

tblFleetMix	MCY	6.2620e-003	0.00
tblFleetMix	MCY	6.2620e-003	0.00
tblFleetMix	MCY	6.2620e-003	0.00
tblFleetMix	MCY	6.2620e-003	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.42
tblFleetMix	MH	5.1900e-004	0.00
tblFleetMix	MH	5.1900e-004	0.00
tblFleetMix	MH	5.1900e-004	0.00
tblFleetMix	MH	5.1900e-004	0.00
tblFleetMix	MH	5.1900e-004	0.00
tblFleetMix	MH	5.1900e-004	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.19
tblFleetMix	OBUS	4.2880e-003	0.00
tblFleetMix	OBUS	4.2880e-003	0.00
tblFleetMix	OBUS	4.2880e-003	0.00
tblFleetMix	OBUS	4.2880e-003	0.00
tblFleetMix	OBUS	4.2880e-003	0.00

tblFleetMix	OBUS	4.2880e-003	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	UBUS	3.5530e-003	0.00
tblFleetMix	UBUS	3.5530e-003	0.00
tblFleetMix	UBUS	3.5530e-003	0.00
tblFleetMix	UBUS	3.5530e-003	0.00
tblFleetMix	UBUS	3.5530e-003	0.00
tblFleetMix	UBUS	3.5530e-003	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	301
tblProjectCharacteristics	OperationalYear	2018	2024
tblVehicleEF	HHD	0.56	0.05
tblVehicleEF	HHD	0.38	0.35
tblVehicleEF	HHD	0.06	1.0000e-006
tblVehicleEF	HHD	1.74	4.91
tblVehicleEF	HHD	2.21	1.39
tblVehicleEF	HHD	4.51	0.01
tblVehicleEF	HHD	3,134.48	944.78
tblVehicleEF	HHD	1,887.93	1,827.00
tblVehicleEF	HHD	14.15	0.11
tblVehicleEF	HHD	9.2570e-003	8.5740e-003
tblVehicleEF	HHD	17.68	5.87
tblVehicleEF	HHD	3.02	3.67

tblVehicleEF	HHD	18.99	2.33
tblVehicleEF	HHD	0.03	5.9640e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.4530e-003	0.02
tblVehicleEF	HHD	1.4500e-004	2.0000e-006
tblVehicleEF	HHD	0.02	5.7060e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.5310e-003	8.7170e-003
tblVehicleEF	HHD	8.0860e-003	0.02
tblVehicleEF	HHD	1.3300e-004	2.0000e-006
tblVehicleEF	HHD	7.9000e-005	6.0000e-006
tblVehicleEF	HHD	4.0930e-003	3.5600e-004
tblVehicleEF	HHD	0.39	0.33
tblVehicleEF	HHD	5.6000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.04
tblVehicleEF	HHD	6.6800e-004	2.4900e-004
tblVehicleEF	HHD	0.09	6.0000e-006
tblVehicleEF	HHD	0.03	7.9910e-003
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	2.1500e-004	1.0000e-006
tblVehicleEF	HHD	7.9000e-005	6.0000e-006
tblVehicleEF	HHD	4.0930e-003	3.5600e-004
tblVehicleEF	HHD	0.48	0.40
tblVehicleEF	HHD	5.6000e-005	4.0000e-006
tblVehicleEF	HHD	0.48	0.40
tblVehicleEF	HHD	6.6800e-004	2.4900e-004

tblVehicleEF	HHD	0.10	6.0000e-006
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tblVehicleEF	LDA	0.49	0.56
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tblVehicleEF	LDA	0.06	0.17
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tblVehicleEF	LDA	2.2530e-003	1.7140e-003
tblVehicleEF	LDA	1.9270e-003	1.5720e-003
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tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	9.2100e-003	7.6970e-003
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	2.4900e-003	2.4670e-003
tblVehicleEF	LDA	5.4300e-004	4.9400e-004
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.03

tblVehicleEF	LDA	0.06	0.22
tblVehicleEF	LDT1	5.9890e-003	3.3460e-003
tblVehicleEF	LDT1	8.2800e-003	0.05
tblVehicleEF	LDT1	0.74	0.77
tblVehicleEF	LDT1	1.81	2.29
tblVehicleEF	LDT1	310.75	301.05
tblVehicleEF	LDT1	66.21	60.36
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.06	0.05
tblVehicleEF	LDT1	0.10	0.21
tblVehicleEF	LDT1	2.3520e-003	1.9580e-003
tblVehicleEF	LDT1	2.5880e-003	1.9990e-003
tblVehicleEF	LDT1	2.1640e-003	1.8020e-003
tblVehicleEF	LDT1	2.3800e-003	1.8380e-003
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.16	0.12
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.01	0.01
tblVehicleEF	LDT1	0.13	0.07
tblVehicleEF	LDT1	0.11	0.25
tblVehicleEF	LDT1	3.1140e-003	2.9790e-003
tblVehicleEF	LDT1	6.9300e-004	5.9700e-004
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.16	0.12
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.13	0.07

tblVehicleEF	LDT1	0.12	0.28
tblVehicleEF	LDT2	5.0070e-003	3.0070e-003
tblVehicleEF	LDT2	5.1920e-003	0.06
tblVehicleEF	LDT2	0.64	0.71
tblVehicleEF	LDT2	1.22	2.68
tblVehicleEF	LDT2	350.14	318.38
tblVehicleEF	LDT2	73.70	64.11
tblVehicleEF	LDT2	0.19	0.17
tblVehicleEF	LDT2	0.06	0.05
tblVehicleEF	LDT2	0.08	0.23
tblVehicleEF	LDT2	2.1760e-003	1.7430e-003
tblVehicleEF	LDT2	2.3270e-003	1.6970e-003
tblVehicleEF	LDT2	2.0010e-003	1.6040e-003
tblVehicleEF	LDT2	2.1400e-003	1.5600e-003
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.09	0.10
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.07	0.27
tblVehicleEF	LDT2	3.5050e-003	3.1490e-003
tblVehicleEF	LDT2	7.5700e-004	6.3400e-004
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.09	0.10
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.06

tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LHD1	5.6310e-003	5.7060e-003
tblVehicleEF	LHD1	0.01	6.6600e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.20
tblVehicleEF	LHD1	0.75	0.58
tblVehicleEF	LHD1	2.33	1.10
tblVehicleEF	LHD1	8.76	8.63
tblVehicleEF	LHD1	690.52	806.60
tblVehicleEF	LHD1	35.12	12.89
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.60	0.34
tblVehicleEF	LHD1	1.03	0.33
tblVehicleEF	LHD1	7.0900e-004	6.8000e-004
tblVehicleEF	LHD1	9.9640e-003	9.5380e-003
tblVehicleEF	LHD1	9.9640e-003	6.6230e-003
tblVehicleEF	LHD1	8.1300e-004	2.4000e-004
tblVehicleEF	LHD1	6.7800e-004	6.5100e-004
tblVehicleEF	LHD1	2.4910e-003	2.3840e-003
tblVehicleEF	LHD1	9.4940e-003	6.2890e-003
tblVehicleEF	LHD1	7.4800e-004	2.2100e-004
tblVehicleEF	LHD1	1.8860e-003	1.4240e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2420e-003	9.2100e-004
tblVehicleEF	LHD1	0.09	0.07

tblVehicleEF	LHD1	0.28	0.16
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	8.8000e-005	8.4000e-005
tblVehicleEF	LHD1	6.7840e-003	7.8940e-003
tblVehicleEF	LHD1	3.9500e-004	1.2800e-004
tblVehicleEF	LHD1	1.8860e-003	1.4240e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.2420e-003	9.2100e-004
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.28	0.16
tblVehicleEF	LHD1	0.26	0.07
tblVehicleEF	LHD2	3.2090e-003	3.3650e-003
tblVehicleEF	LHD2	6.7110e-003	6.0180e-003
tblVehicleEF	LHD2	5.6100e-003	7.6680e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.50	0.52
tblVehicleEF	LHD2	1.11	0.65
tblVehicleEF	LHD2	13.84	13.47
tblVehicleEF	LHD2	698.44	765.11
tblVehicleEF	LHD2	23.92	8.40
tblVehicleEF	LHD2	5.0770e-003	5.5390e-003
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.44	0.47
tblVehicleEF	LHD2	0.40	0.19
tblVehicleEF	LHD2	1.1970e-003	1.3540e-003
tblVehicleEF	LHD2	0.01	0.01

tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.9100e-004	1.2600e-004
tblVehicleEF	LHD2	1.1450e-003	1.2960e-003
tblVehicleEF	LHD2	2.6920e-003	2.6650e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5900e-004	1.1600e-004
tblVehicleEF	LHD2	5.8600e-004	8.0100e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.8300e-004	5.0800e-004
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.06	0.09
tblVehicleEF	LHD2	0.08	0.04
tblVehicleEF	LHD2	1.3500e-004	1.2900e-004
tblVehicleEF	LHD2	6.7910e-003	7.3990e-003
tblVehicleEF	LHD2	2.5900e-004	8.3000e-005
tblVehicleEF	LHD2	5.8600e-004	8.0100e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	3.8300e-004	5.0800e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.06	0.09
tblVehicleEF	LHD2	0.08	0.04
tblVehicleEF	MCY	0.56	0.40
tblVehicleEF	MCY	0.17	0.25
tblVehicleEF	MCY	20.61	20.63
tblVehicleEF	MCY	10.18	9.07

tblVehicleEF	MCY	193.06	229.85
tblVehicleEF	MCY	46.00	61.66
tblVehicleEF	MCY	6.2620e-003	7.1020e-003
tblVehicleEF	MCY	1.19	1.19
tblVehicleEF	MCY	0.33	0.28
tblVehicleEF	MCY	2.5080e-003	2.3850e-003
tblVehicleEF	MCY	3.7870e-003	2.9930e-003
tblVehicleEF	MCY	2.3460e-003	2.2300e-003
tblVehicleEF	MCY	3.5710e-003	2.8200e-003
tblVehicleEF	MCY	0.79	0.79
tblVehicleEF	MCY	0.80	0.78
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	2.80	2.80
tblVehicleEF	MCY	0.84	0.70
tblVehicleEF	MCY	2.26	1.99
tblVehicleEF	MCY	2.3520e-003	2.2750e-003
tblVehicleEF	MCY	6.9300e-004	6.1000e-004
tblVehicleEF	MCY	0.79	0.79
tblVehicleEF	MCY	0.80	0.78
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	3.46	3.47
tblVehicleEF	MCY	0.84	0.70
tblVehicleEF	MCY	2.46	2.16
tblVehicleEF	MDV	7.1350e-003	3.0460e-003
tblVehicleEF	MDV	9.0500e-003	0.06
tblVehicleEF	MDV	0.80	0.69
tblVehicleEF	MDV	1.79	2.72

tblVehicleEF	MDV	460.22	375.26
tblVehicleEF	MDV	94.54	73.63
tblVehicleEF	MDV	0.09	0.11
tblVehicleEF	MDV	0.08	0.05
tblVehicleEF	MDV	0.14	0.23
tblVehicleEF	MDV	2.2400e-003	1.8270e-003
tblVehicleEF	MDV	2.3440e-003	1.7490e-003
tblVehicleEF	MDV	2.0640e-003	1.6850e-003
tblVehicleEF	MDV	2.1550e-003	1.6080e-003
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.11	0.09
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.02	0.01
tblVehicleEF	MDV	0.09	0.05
tblVehicleEF	MDV	0.12	0.27
tblVehicleEF	MDV	4.6020e-003	3.7080e-003
tblVehicleEF	MDV	9.7600e-004	7.2900e-004
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.11	0.09
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.09	0.05
tblVehicleEF	MDV	0.13	0.30
tblVehicleEF	MH	0.02	7.9410e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.01	0.78
tblVehicleEF	MH	4.36	1.96

tblVehicleEF	MH	1,185.81	1,444.02
tblVehicleEF	MH	56.72	17.21
tblVehicleEF	MH	5.1900e-004	5.8400e-004
tblVehicleEF	MH	0.83	0.98
tblVehicleEF	MH	0.62	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.0110e-003	2.8400e-004
tblVehicleEF	MH	3.2230e-003	3.2780e-003
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	9.3000e-004	2.6100e-004
tblVehicleEF	MH	0.34	0.38
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.15	0.15
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	0.01	9.9170e-003
tblVehicleEF	MH	0.24	0.08
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.4300e-004	1.7000e-004
tblVehicleEF	MH	0.34	0.38
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.15	0.15
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.01	9.9170e-003
tblVehicleEF	MH	0.27	0.09
tblVehicleEF	MHD	0.02	3.1870e-003
tblVehicleEF	MHD	3.4540e-003	1.3420e-003

tblVehicleEF	MHD	0.05	7.5740e-003
tblVehicleEF	MHD	0.31	0.50
tblVehicleEF	MHD	0.30	0.19
tblVehicleEF	MHD	4.66	0.85
tblVehicleEF	MHD	155.32	115.14
tblVehicleEF	MHD	1,179.47	1,042.42
tblVehicleEF	MHD	51.33	7.73
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	0.45	0.72
tblVehicleEF	MHD	1.09	1.42
tblVehicleEF	MHD	12.05	1.80
tblVehicleEF	MHD	1.5900e-004	6.2700e-004
tblVehicleEF	MHD	3.1450e-003	6.7340e-003
tblVehicleEF	MHD	7.2000e-004	8.6000e-005
tblVehicleEF	MHD	1.5200e-004	6.0000e-004
tblVehicleEF	MHD	3.0060e-003	6.4390e-003
tblVehicleEF	MHD	6.6200e-004	7.9000e-005
tblVehicleEF	MHD	7.5300e-004	3.0600e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.8600e-004	1.9900e-004
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.29	0.04
tblVehicleEF	MHD	1.4920e-003	1.0890e-003
tblVehicleEF	MHD	0.01	9.9130e-003
tblVehicleEF	MHD	5.9500e-004	7.7000e-005

tblVehicleEF	MHD	7.5300e-004	3.0600e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	4.8600e-004	1.9900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	OBUS	0.01	6.6390e-003
tblVehicleEF	OBUS	5.3460e-003	3.7010e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.24	0.61
tblVehicleEF	OBUS	0.42	0.48
tblVehicleEF	OBUS	4.75	1.70
tblVehicleEF	OBUS	142.11	100.56
tblVehicleEF	OBUS	1,309.44	1,333.01
tblVehicleEF	OBUS	64.09	14.28
tblVehicleEF	OBUS	4.2880e-003	3.4080e-003
tblVehicleEF	OBUS	0.32	0.41
tblVehicleEF	OBUS	1.10	1.59
tblVehicleEF	OBUS	3.67	1.17
tblVehicleEF	OBUS	2.9000e-005	1.3400e-004
tblVehicleEF	OBUS	3.1040e-003	8.1250e-003
tblVehicleEF	OBUS	6.6000e-004	1.4000e-004
tblVehicleEF	OBUS	2.8000e-005	1.2900e-004
tblVehicleEF	OBUS	2.9580e-003	7.7640e-003
tblVehicleEF	OBUS	6.0600e-004	1.2900e-004
tblVehicleEF	OBUS	1.0980e-003	1.0910e-003

tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	6.0200e-004	5.6600e-004
tblVehicleEF	OBUS	0.05	0.03
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.30	0.08
tblVehicleEF	OBUS	1.3670e-003	9.5500e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.2400e-004	1.4100e-004
tblVehicleEF	OBUS	1.0980e-003	1.0910e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	6.0200e-004	5.6600e-004
tblVehicleEF	OBUS	0.06	0.03
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.33	0.09
tblVehicleEF	SBUS	0.81	0.16
tblVehicleEF	SBUS	9.8340e-003	3.3570e-003
tblVehicleEF	SBUS	0.06	0.01
tblVehicleEF	SBUS	8.09	5.87
tblVehicleEF	SBUS	0.59	0.28
tblVehicleEF	SBUS	7.19	1.80
tblVehicleEF	SBUS	1,103.84	390.07
tblVehicleEF	SBUS	1,057.81	932.50
tblVehicleEF	SBUS	57.01	11.79
tblVehicleEF	SBUS	9.4500e-004	1.0360e-003
tblVehicleEF	SBUS	7.90	2.10

tblVehicleEF	SBUS	3.38	1.47
tblVehicleEF	SBUS	11.83	1.21
tblVehicleEF	SBUS	7.0490e-003	1.4420e-003
tblVehicleEF	SBUS	0.01	9.6480e-003
tblVehicleEF	SBUS	0.02	9.6500e-003
tblVehicleEF	SBUS	6.8100e-004	1.4900e-004
tblVehicleEF	SBUS	6.7440e-003	1.3800e-003
tblVehicleEF	SBUS	2.6370e-003	2.4120e-003
tblVehicleEF	SBUS	0.02	9.2040e-003
tblVehicleEF	SBUS	6.2600e-004	1.3700e-004
tblVehicleEF	SBUS	2.7710e-003	1.1660e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.96	0.71
tblVehicleEF	SBUS	1.5500e-003	6.2300e-004
tblVehicleEF	SBUS	0.09	0.03
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.38	0.07
tblVehicleEF	SBUS	0.01	3.7520e-003
tblVehicleEF	SBUS	0.01	9.0210e-003
tblVehicleEF	SBUS	6.9400e-004	1.1700e-004
tblVehicleEF	SBUS	2.7710e-003	1.1660e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.38	1.03
tblVehicleEF	SBUS	1.5500e-003	6.2300e-004
tblVehicleEF	SBUS	0.11	0.04
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.42	0.08

tblVehicleEF	UBUS	0.42	1.38
tblVehicleEF	UBUS	0.05	0.00
tblVehicleEF	UBUS	8.65	10.31
tblVehicleEF	UBUS	9.26	0.00
tblVehicleEF	UBUS	2,259.15	1,709.68
tblVehicleEF	UBUS	65.85	0.00
tblVehicleEF	UBUS	3.5530e-003	6.4740e-003
tblVehicleEF	UBUS	15.81	0.75
tblVehicleEF	UBUS	17.18	0.00
tblVehicleEF	UBUS	0.69	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.30	5.4620e-003
tblVehicleEF	UBUS	1.1580e-003	0.00
tblVehicleEF	UBUS	0.29	0.03
tblVehicleEF	UBUS	3.0000e-003	8.6540e-003
tblVehicleEF	UBUS	0.29	5.2260e-003
tblVehicleEF	UBUS	1.0650e-003	0.00
tblVehicleEF	UBUS	3.1800e-003	0.00
tblVehicleEF	UBUS	0.08	0.00
tblVehicleEF	UBUS	1.5890e-003	0.00
tblVehicleEF	UBUS	1.27	0.02
tblVehicleEF	UBUS	0.03	0.00
tblVehicleEF	UBUS	0.62	0.00
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	8.2300e-004	0.00
tblVehicleEF	UBUS	3.1800e-003	0.00
tblVehicleEF	UBUS	0.08	0.00

tblVehicleEF	UBUS	1.5890e-003	0.00
tblVehicleEF	UBUS	1.79	1.41
tblVehicleEF	UBUS	0.03	0.00
tblVehicleEF	UBUS	0.68	0.00
tblVehicleTrips	ST_TR	6.39	1.86
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	5.67	1.86
tblVehicleTrips	ST_TR	42.04	38.00
tblVehicleTrips	ST_TR	0.00	24.27
tblVehicleTrips	SU_TR	5.86	1.86
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	4.84	1.86
tblVehicleTrips	SU_TR	20.43	38.00
tblVehicleTrips	SU_TR	0.00	24.27
tblVehicleTrips	WD_TR	6.65	1.86
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	5.81	1.86
tblVehicleTrips	WD_TR	44.32	38.00
tblVehicleTrips	WD_TR	0.00	24.27
tblWoodstoves	NumberCatalytic	10.90	0.00
tblWoodstoves	NumberNoncatalytic	10.90	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021											0.0000	52.6306	52.6306	0.0144	0.0000	52.9903
Maximum											**0.0000**	**52.6306**	**52.6306**	**0.0144**	**0.0000**	**52.9903**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021											0.0000	52.6305	52.6305	0.0144	0.0000	52.9902
Maximum											**0.0000**	**52.6305**	**52.6305**	**0.0144**	**0.0000**	**52.9902**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											1.5597	20.3170	21.8767	0.0151	2.3000e-004	22.3215
Energy											0.0000	903.4371	903.4371	0.0590	0.0174	910.1048
Mobile											0.0000	887.1772	887.1772	0.0332	0.0000	888.0060
Stationary											0.0000	7.6540	7.6540	1.0700e-003	0.0000	7.6809
Waste											61.8960	0.0000	61.8960	3.6580	0.0000	153.3447
Water											13.5086	46.5572	60.0658	1.3920	0.0337	104.9040
Total											**76.9643**	**1,865.1425**	**1,942.1068**	**5.1582**	**0.0514**	**2,086.3618**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											1.5597	20.3170	21.8767	0.0151	2.3000e-004	22.3215
Energy											0.0000	903.4371	903.4371	0.0590	0.0174	910.1048
Mobile											0.0000	887.1772	887.1772	0.0332	0.0000	888.0060
Stationary											0.0000	7.6540	7.6540	1.0700e-003	0.0000	7.6809
Waste											61.8960	0.0000	61.8960	3.6580	0.0000	153.3447
Water											13.5086	46.5572	60.0658	1.3920	0.0337	104.9040
Total											**76.9643**	**1,865.1425**	**1,942.1068**	**5.1582**	**0.0514**	**2,086.3618**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	2/11/2021	5	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.95

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total											**0.0000**	**51.0012**	**51.0012**	**0.0144**	**0.0000**	**51.3601**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.6294	1.6294	3.0000e-005	0.0000	1.6302
Total											**0.0000**	**1.6294**	**1.6294**	**3.0000e-005**	**0.0000**	**1.6302**

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total											**0.0000**	**51.0011**	**51.0011**	**0.0144**	**0.0000**	**51.3600**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.6294	1.6294	3.0000e-005	0.0000	1.6302
Total											**0.0000**	**1.6294**	**1.6294**	**3.0000e-005**	**0.0000**	**1.6302**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	887.1772	887.1772	0.0332	0.0000	888.0060
Unmitigated											0.0000	887.1772	887.1772	0.0332	0.0000	888.0060

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,013.70	1,013.70	1013.70	2,341,249	2,341,249
City Park	0.00	0.00	0.00		
Condo/Townhouse	186.00	186.00	186.00	429,587	429,587
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	285.00	285.00	285.00	438,909	438,909
User Defined Parking	0.00	0.00	0.00		
Total	1,484.70	1,484.70	1,484.70	3,209,745	3,209,745

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
User Defined Parking	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.717400	0.067800	0.214700	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
City Park	0.717400	0.067800	0.214700	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Condo/Townhouse	0.717400	0.067800	0.214700	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Enclosed Parking with Elevator	0.717400	0.067800	0.214700	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Strip Mall	0.717400	0.067800	0.214700	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
User Defined Parking	0.180000	0.020000	0.040000	0.420000	0.000000	0.090000	0.190000	0.050000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Balboa Reservoir, Operational: Developer Option - Phase 1 - San Francisco County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	539.8387	539.8387	0.0520	0.0108	544.3458
Electricity Unmitigated											0.0000	539.8387	539.8387	0.0520	0.0108	544.3458
NaturalGas Mitigated											0.0000	363.5983	363.5983	6.9700e-003	6.6700e-003	365.7590
NaturalGas Unmitigated											0.0000	363.5983	363.5983	6.9700e-003	6.6700e-003	365.7590

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	4.60121e+006											0.0000	245.5383	245.5383	4.7100e-003	4.5000e-003	246.9974
City Park	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	2.17741e+006											0.0000	116.1950	116.1950	2.2300e-003	2.1300e-003	116.8854
Enclosed Parking with Elevator	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	34950											0.0000	1.8651	1.8651	4.0000e-005	3.0000e-005	1.8762
User Defined Parking	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**363.5983**	**363.5983**	**6.9800e-003**	**6.6600e-003**	**365.7590**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	4.60121e+006											0.0000	245.5383	245.5383	4.7100e-003	4.5000e-003	246.9974
City Park	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	2.17741e+006											0.0000	116.1950	116.1950	2.2300e-003	2.1300e-003	116.8854
Enclosed Parking with Elevator	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	34950											0.0000	1.8651	1.8651	4.0000e-005	3.0000e-005	1.8762
User Defined Parking	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**363.5983**	**363.5983**	**6.9800e-003**	**6.6600e-003**	**365.7590**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	2.23733e+006	305.4662	0.0294	6.0900e-003	308.0165
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	488007	66.6282	6.4200e-003	1.3300e-003	67.1845
Enclosed Parking with Elevator	1.15573e+006	157.7931	0.0152	3.1500e-003	159.1105
Strip Mall	72886.2	9.9513	9.6000e-004	2.0000e-004	10.0343
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**539.8387**	**0.0520**	**0.0108**	**544.3458**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	2.23733e+006	305.4662	0.0294	6.0900e-003	308.0165
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	488007	66.6282	6.4200e-003	1.3300e-003	67.1845
Enclosed Parking with Elevator	1.15573e+006	157.7931	0.0152	3.1500e-003	159.1105
Strip Mall	72886.2	9.9513	9.6000e-004	2.0000e-004	10.0343
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**539.8387**	**0.0520**	**0.0108**	**544.3458**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											1.5597	20.3170	21.8767	0.0151	2.3000e-004	22.3215
Unmitigated											1.5597	20.3170	21.8767	0.0151	2.3000e-004	22.3215

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											1.5597	12.4839	14.0436	7.5300e-003	2.3000e-004	14.3001
Landscaping											0.0000	7.8331	7.8331	7.5300e-003	0.0000	8.0214
Total											**1.5597**	**20.3170**	**21.8767**	**0.0151**	**2.3000e-004**	**22.3215**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											1.5597	12.4839	14.0436	7.5300e-003	2.3000e-004	14.3001
Landscaping											0.0000	7.8331	7.8331	7.5300e-003	0.0000	8.0214
Total											**1.5597**	**20.3170**	**21.8767**	**0.0151**	**2.3000e-004**	**22.3215**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	60.0658	1.3920	0.0337	104.9040
Unmitigated	60.0658	1.3920	0.0337	104.9040

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	35.5089 / 22.3861	48.1957	1.1606	0.0281	85.5721
City Park	0 / 4.76593	2.2774	2.2000e-004	5.0000e-005	2.2965
Condo/Townhouse	6.5154 / 4.10754	8.8433	0.2130	5.1500e-003	15.7013
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.555544 / 0.340495	0.7494	0.0182	4.4000e-004	1.3341
User Defined Parking	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**60.0658**	**1.3920**	**0.0337**	**104.9040**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	35.5089 / 22.3861	48.1957	1.1606	0.0281	85.5721
City Park	0 / 4.76593	2.2774	2.2000e-004	5.0000e-005	2.2965
Condo/Townhouse	6.5154 / 4.10754	8.8433	0.2130	5.1500e-003	15.7013
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.555544 / 0.340495	0.7494	0.0182	4.4000e-004	1.3341
User Defined Parking	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**60.0658**	**1.3920**	**0.0337**	**104.9040**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	61.8960	3.6580	0.0000	153.3447
Unmitigated	61.8960	3.6580	0.0000	153.3447

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	250.7	50.8898	3.0075	0.0000	126.0774
City Park	0.34	0.0690	4.0800e-003	0.0000	0.1710
Condo/Townhouse	46	9.3376	0.5518	0.0000	23.1335
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	7.88	1.5996	0.0945	0.0000	3.9629
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**61.8960**	**3.6580**	**0.0000**	**153.3447**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	250.7	50.8898	3.0075	0.0000	126.0774
City Park	0.34	0.0690	4.0800e-003	0.0000	0.1710
Condo/Townhouse	46	9.3376	0.5518	0.0000	23.1335
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	7.88	1.5996	0.0945	0.0000	3.9629
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**61.8960**	**3.6580**	**0.0000**	**153.3447**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	2	50	402	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (300 - 600 HP)											0.0000	7.6540	7.6540	1.0700e-003	0.0000	7.6809
Total											**0.0000**	**7.6540**	**7.6540**	**1.0700e-003**	**0.0000**	**7.6809**

11.0 Vegetation

Balboa Reservoir, Operational: Developer Option - Phase 1

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	550.00	Space	4.95	220,000.00	0
User Defined Parking	0.00	User Defined Unit	0.00	0.00	0
City Park	4.00	Acre	4.00	174,240.00	0
Apartments Mid Rise	545.00	Dwelling Unit	14.34	545,000.00	1559
Condo/Townhouse	100.00	Dwelling Unit	6.25	100,000.00	286
Strip Mall	7.50	1000sqft	0.17	7,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Balboa Reservoir, Operational: Developer Option - Phase 1 - San Francisco County, Annual

Project Characteristics - CO2 Intensity Factor is adjusted to account for RPS decreases.

Land Use - Residential square footage scaled based on total residential gross ksf, consistent with the Project description.

Construction Phase - Construction is evaluated separately.

Off-road Equipment - xxx

Off-road Equipment -

Vehicle Trips - Operational trips based on May 14, 2019 Kittelson & Assoc traffic analysis.

Vehicle Emission Factors - Mobile emission factors updated based on EMFAC2017 for 2024.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumed 100 natural gas fireplaces, per Project Sponsor.

Energy Use - For Apartments and Condos: Assumed 10% electricity and lighting energy reduction, and 4.7% natural gas energy reduction consistent with 2019 Title 24. For all other landuses, assumed 10.7% electricity and lighting energy reduction, and 1% natural gas ener

Operational Off-Road Equipment -

Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	13200	22584
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblEnergyUse	LightingElect	741.44	667.30
tblEnergyUse	LightingElect	1,001.10	900.99
tblEnergyUse	LightingElect	2.63	1.56
tblEnergyUse	LightingElect	5.00	4.36
tblEnergyUse	NT24E	3,277.06	3,054.10
tblEnergyUse	NT24E	4,109.59	3,795.01
tblEnergyUse	T24E	502.89	383.81
tblEnergyUse	T24E	231.62	184.07
tblEnergyUse	T24E	3.92	3.50

tblEnergyUse	T24E	2.35	2.00
tblEnergyUse	T24NG	8,824.58	5,827.60
tblEnergyUse	T24NG	25,448.35	19,159.11
tblEnergyUse	T24NG	3.92	3.96
tblFireplaces	NumberGas	81.75	0.00
tblFireplaces	NumberGas	15.00	100.00
tblFireplaces	NumberNoFireplace	21.80	545.00
tblFireplaces	NumberNoFireplace	4.00	0.00
tblFireplaces	NumberWood	92.65	0.00
tblFireplaces	NumberWood	17.00	0.00
tblFleetMix	FleetMixLandUseSubType	Enclosed Parking with Elevator	Apartments Mid Rise
tblFleetMix	FleetMixLandUseSubType	User Defined Parking	City Park
tblFleetMix	FleetMixLandUseSubType	City Park	Condo/Townhouse
tblFleetMix	FleetMixLandUseSubType	Apartments Mid Rise	Enclosed Parking with Elevator
tblFleetMix	FleetMixLandUseSubType	Condo/Townhouse	Strip Mall
tblFleetMix	FleetMixLandUseSubType	Strip Mall	User Defined Parking
tblFleetMix	HHD	9.2570e-003	0.00
tblFleetMix	HHD	9.2570e-003	0.00
tblFleetMix	HHD	9.2570e-003	0.00
tblFleetMix	HHD	9.2570e-003	0.00
tblFleetMix	HHD	9.2570e-003	0.00
tblFleetMix	HHD	9.2570e-003	0.05
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.72

tblFleetMix	LDA	0.60	0.18
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.02
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.05
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD2	5.0770e-003	0.00
tblFleetMix	LHD2	5.0770e-003	0.00
tblFleetMix	LHD2	5.0770e-003	0.00
tblFleetMix	LHD2	5.0770e-003	0.00
tblFleetMix	LHD2	5.0770e-003	0.00
tblFleetMix	LHD2	5.0770e-003	0.09
tblFleetMix	MCY	6.2620e-003	0.00
tblFleetMix	MCY	6.2620e-003	0.00

tblFleetMix	MCY	6.2620e-003	0.00
tblFleetMix	MCY	6.2620e-003	0.00
tblFleetMix	MCY	6.2620e-003	0.00
tblFleetMix	MCY	6.2620e-003	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.42
tblFleetMix	MH	5.1900e-004	0.00
tblFleetMix	MH	5.1900e-004	0.00
tblFleetMix	MH	5.1900e-004	0.00
tblFleetMix	MH	5.1900e-004	0.00
tblFleetMix	MH	5.1900e-004	0.00
tblFleetMix	MH	5.1900e-004	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.19
tblFleetMix	OBUS	4.2880e-003	0.00
tblFleetMix	OBUS	4.2880e-003	0.00
tblFleetMix	OBUS	4.2880e-003	0.00
tblFleetMix	OBUS	4.2880e-003	0.00
tblFleetMix	OBUS	4.2880e-003	0.00

tblFleetMix	OBUS	4.2880e-003	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	UBUS	3.5530e-003	0.00
tblFleetMix	UBUS	3.5530e-003	0.00
tblFleetMix	UBUS	3.5530e-003	0.00
tblFleetMix	UBUS	3.5530e-003	0.00
tblFleetMix	UBUS	3.5530e-003	0.00
tblFleetMix	UBUS	3.5530e-003	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	0
tblProjectCharacteristics	OperationalYear	2018	2024
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	402.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	2.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleEF	HHD	0.56	0.05
tblVehicleEF	HHD	0.38	0.35
tblVehicleEF	HHD	0.06	1.0000e-006
tblVehicleEF	HHD	1.74	4.91
tblVehicleEF	HHD	2.21	1.39
tblVehicleEF	HHD	4.51	0.01
tblVehicleEF	HHD	3,134.48	944.78
tblVehicleEF	HHD	1,887.93	1,827.00

tblVehicleEF	HHD	14.15	0.11
tblVehicleEF	HHD	9.2570e-003	8.5740e-003
tblVehicleEF	HHD	17.68	5.87
tblVehicleEF	HHD	3.02	3.67
tblVehicleEF	HHD	18.99	2.33
tblVehicleEF	HHD	0.03	5.9640e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.4530e-003	0.02
tblVehicleEF	HHD	1.4500e-004	2.0000e-006
tblVehicleEF	HHD	0.02	5.7060e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.5310e-003	8.7170e-003
tblVehicleEF	HHD	8.0860e-003	0.02
tblVehicleEF	HHD	1.3300e-004	2.0000e-006
tblVehicleEF	HHD	7.9000e-005	6.0000e-006
tblVehicleEF	HHD	4.0930e-003	3.5600e-004
tblVehicleEF	HHD	0.39	0.33
tblVehicleEF	HHD	5.6000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.04
tblVehicleEF	HHD	6.6800e-004	2.4900e-004
tblVehicleEF	HHD	0.09	6.0000e-006
tblVehicleEF	HHD	0.03	7.9910e-003
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	2.1500e-004	1.0000e-006
tblVehicleEF	HHD	7.9000e-005	6.0000e-006
tblVehicleEF	HHD	4.0930e-003	3.5600e-004

tblVehicleEF	HHD	0.48	0.40
tblVehicleEF	HHD	5.6000e-005	4.0000e-006
tblVehicleEF	HHD	0.48	0.40
tblVehicleEF	HHD	6.6800e-004	2.4900e-004
tblVehicleEF	HHD	0.10	6.0000e-006
tblVehicleEF	LDA	3.6440e-003	2.0270e-003
tblVehicleEF	LDA	4.2460e-003	0.04
tblVehicleEF	LDA	0.49	0.56
tblVehicleEF	LDA	1.00	2.13
tblVehicleEF	LDA	248.83	249.41
tblVehicleEF	LDA	52.61	49.94
tblVehicleEF	LDA	0.60	0.58
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.17
tblVehicleEF	LDA	2.0930e-003	1.7070e-003
tblVehicleEF	LDA	2.2530e-003	1.7140e-003
tblVehicleEF	LDA	1.9270e-003	1.5720e-003
tblVehicleEF	LDA	2.0710e-003	1.5760e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	9.2100e-003	7.6970e-003
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	2.4900e-003	2.4670e-003
tblVehicleEF	LDA	5.4300e-004	4.9400e-004
tblVehicleEF	LDA	0.02	0.03

tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.22
tblVehicleEF	LDT1	5.9890e-003	3.3460e-003
tblVehicleEF	LDT1	8.2800e-003	0.05
tblVehicleEF	LDT1	0.74	0.77
tblVehicleEF	LDT1	1.81	2.29
tblVehicleEF	LDT1	310.75	301.05
tblVehicleEF	LDT1	66.21	60.36
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.06	0.05
tblVehicleEF	LDT1	0.10	0.21
tblVehicleEF	LDT1	2.3520e-003	1.9580e-003
tblVehicleEF	LDT1	2.5880e-003	1.9990e-003
tblVehicleEF	LDT1	2.1640e-003	1.8020e-003
tblVehicleEF	LDT1	2.3800e-003	1.8380e-003
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.16	0.12
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.01	0.01
tblVehicleEF	LDT1	0.13	0.07
tblVehicleEF	LDT1	0.11	0.25
tblVehicleEF	LDT1	3.1140e-003	2.9790e-003
tblVehicleEF	LDT1	6.9300e-004	5.9700e-004
tblVehicleEF	LDT1	0.05	0.05

tblVehicleEF	LDT1	0.16	0.12
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.13	0.07
tblVehicleEF	LDT1	0.12	0.28
tblVehicleEF	LDT2	5.0070e-003	3.0070e-003
tblVehicleEF	LDT2	5.1920e-003	0.06
tblVehicleEF	LDT2	0.64	0.71
tblVehicleEF	LDT2	1.22	2.68
tblVehicleEF	LDT2	350.14	318.38
tblVehicleEF	LDT2	73.70	64.11
tblVehicleEF	LDT2	0.19	0.17
tblVehicleEF	LDT2	0.06	0.05
tblVehicleEF	LDT2	0.08	0.23
tblVehicleEF	LDT2	2.1760e-003	1.7430e-003
tblVehicleEF	LDT2	2.3270e-003	1.6970e-003
tblVehicleEF	LDT2	2.0010e-003	1.6040e-003
tblVehicleEF	LDT2	2.1400e-003	1.5600e-003
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.09	0.10
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.07	0.27
tblVehicleEF	LDT2	3.5050e-003	3.1490e-003
tblVehicleEF	LDT2	7.5700e-004	6.3400e-004
tblVehicleEF	LDT2	0.03	0.05

tblVehicleEF	LDT2	0.09	0.10
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LHD1	5.6310e-003	5.7060e-003
tblVehicleEF	LHD1	0.01	6.6600e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.20
tblVehicleEF	LHD1	0.75	0.58
tblVehicleEF	LHD1	2.33	1.10
tblVehicleEF	LHD1	8.76	8.63
tblVehicleEF	LHD1	690.52	806.60
tblVehicleEF	LHD1	35.12	12.89
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.60	0.34
tblVehicleEF	LHD1	1.03	0.33
tblVehicleEF	LHD1	7.0900e-004	6.8000e-004
tblVehicleEF	LHD1	9.9640e-003	9.5380e-003
tblVehicleEF	LHD1	9.9640e-003	6.6230e-003
tblVehicleEF	LHD1	8.1300e-004	2.4000e-004
tblVehicleEF	LHD1	6.7800e-004	6.5100e-004
tblVehicleEF	LHD1	2.4910e-003	2.3840e-003
tblVehicleEF	LHD1	9.4940e-003	6.2890e-003
tblVehicleEF	LHD1	7.4800e-004	2.2100e-004
tblVehicleEF	LHD1	1.8860e-003	1.4240e-003

tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2420e-003	9.2100e-004
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.28	0.16
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	8.8000e-005	8.4000e-005
tblVehicleEF	LHD1	6.7840e-003	7.8940e-003
tblVehicleEF	LHD1	3.9500e-004	1.2800e-004
tblVehicleEF	LHD1	1.8860e-003	1.4240e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.2420e-003	9.2100e-004
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.28	0.16
tblVehicleEF	LHD1	0.26	0.07
tblVehicleEF	LHD2	3.2090e-003	3.3650e-003
tblVehicleEF	LHD2	6.7110e-003	6.0180e-003
tblVehicleEF	LHD2	5.6100e-003	7.6680e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.50	0.52
tblVehicleEF	LHD2	1.11	0.65
tblVehicleEF	LHD2	13.84	13.47
tblVehicleEF	LHD2	698.44	765.11
tblVehicleEF	LHD2	23.92	8.40
tblVehicleEF	LHD2	5.0770e-003	5.5390e-003
tblVehicleEF	LHD2	0.09	0.08

tblVehicleEF	LHD2	0.44	0.47
tblVehicleEF	LHD2	0.40	0.19
tblVehicleEF	LHD2	1.1970e-003	1.3540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.9100e-004	1.2600e-004
tblVehicleEF	LHD2	1.1450e-003	1.2960e-003
tblVehicleEF	LHD2	2.6920e-003	2.6650e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5900e-004	1.1600e-004
tblVehicleEF	LHD2	5.8600e-004	8.0100e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.8300e-004	5.0800e-004
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.06	0.09
tblVehicleEF	LHD2	0.08	0.04
tblVehicleEF	LHD2	1.3500e-004	1.2900e-004
tblVehicleEF	LHD2	6.7910e-003	7.3990e-003
tblVehicleEF	LHD2	2.5900e-004	8.3000e-005
tblVehicleEF	LHD2	5.8600e-004	8.0100e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	3.8300e-004	5.0800e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.06	0.09
tblVehicleEF	LHD2	0.08	0.04

tblVehicleEF	MCY	0.56	0.40
tblVehicleEF	MCY	0.17	0.25
tblVehicleEF	MCY	20.61	20.63
tblVehicleEF	MCY	10.18	9.07
tblVehicleEF	MCY	193.06	229.85
tblVehicleEF	MCY	46.00	61.66
tblVehicleEF	MCY	6.2620e-003	7.1020e-003
tblVehicleEF	MCY	1.19	1.19
tblVehicleEF	MCY	0.33	0.28
tblVehicleEF	MCY	2.5080e-003	2.3850e-003
tblVehicleEF	MCY	3.7870e-003	2.9930e-003
tblVehicleEF	MCY	2.3460e-003	2.2300e-003
tblVehicleEF	MCY	3.5710e-003	2.8200e-003
tblVehicleEF	MCY	0.79	0.79
tblVehicleEF	MCY	0.80	0.78
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	2.80	2.80
tblVehicleEF	MCY	0.84	0.70
tblVehicleEF	MCY	2.26	1.99
tblVehicleEF	MCY	2.3520e-003	2.2750e-003
tblVehicleEF	MCY	6.9300e-004	6.1000e-004
tblVehicleEF	MCY	0.79	0.79
tblVehicleEF	MCY	0.80	0.78
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	3.46	3.47
tblVehicleEF	MCY	0.84	0.70
tblVehicleEF	MCY	2.46	2.16

tblVehicleEF	MDV	7.1350e-003	3.0460e-003
tblVehicleEF	MDV	9.0500e-003	0.06
tblVehicleEF	MDV	0.80	0.69
tblVehicleEF	MDV	1.79	2.72
tblVehicleEF	MDV	460.22	375.26
tblVehicleEF	MDV	94.54	73.63
tblVehicleEF	MDV	0.09	0.11
tblVehicleEF	MDV	0.08	0.05
tblVehicleEF	MDV	0.14	0.23
tblVehicleEF	MDV	2.2400e-003	1.8270e-003
tblVehicleEF	MDV	2.3440e-003	1.7490e-003
tblVehicleEF	MDV	2.0640e-003	1.6850e-003
tblVehicleEF	MDV	2.1550e-003	1.6080e-003
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.11	0.09
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.02	0.01
tblVehicleEF	MDV	0.09	0.05
tblVehicleEF	MDV	0.12	0.27
tblVehicleEF	MDV	4.6020e-003	3.7080e-003
tblVehicleEF	MDV	9.7600e-004	7.2900e-004
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.11	0.09
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.09	0.05
tblVehicleEF	MDV	0.13	0.30

tblVehicleEF	MH	0.02	7.9410e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.01	0.78
tblVehicleEF	MH	4.36	1.96
tblVehicleEF	MH	1,185.81	1,444.02
tblVehicleEF	MH	56.72	17.21
tblVehicleEF	MH	5.1900e-004	5.8400e-004
tblVehicleEF	MH	0.83	0.98
tblVehicleEF	MH	0.62	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.0110e-003	2.8400e-004
tblVehicleEF	MH	3.2230e-003	3.2780e-003
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	9.3000e-004	2.6100e-004
tblVehicleEF	MH	0.34	0.38
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.15	0.15
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	0.01	9.9170e-003
tblVehicleEF	MH	0.24	0.08
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.4300e-004	1.7000e-004
tblVehicleEF	MH	0.34	0.38
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.15	0.15
tblVehicleEF	MH	0.07	0.07

tblVehicleEF	MH	0.01	9.9170e-003
tblVehicleEF	MH	0.27	0.09
tblVehicleEF	MHD	0.02	3.1870e-003
tblVehicleEF	MHD	3.4540e-003	1.3420e-003
tblVehicleEF	MHD	0.05	7.5740e-003
tblVehicleEF	MHD	0.31	0.50
tblVehicleEF	MHD	0.30	0.19
tblVehicleEF	MHD	4.66	0.85
tblVehicleEF	MHD	155.32	115.14
tblVehicleEF	MHD	1,179.47	1,042.42
tblVehicleEF	MHD	51.33	7.73
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	0.45	0.72
tblVehicleEF	MHD	1.09	1.42
tblVehicleEF	MHD	12.05	1.80
tblVehicleEF	MHD	1.5900e-004	6.2700e-004
tblVehicleEF	MHD	3.1450e-003	6.7340e-003
tblVehicleEF	MHD	7.2000e-004	8.6000e-005
tblVehicleEF	MHD	1.5200e-004	6.0000e-004
tblVehicleEF	MHD	3.0060e-003	6.4390e-003
tblVehicleEF	MHD	6.6200e-004	7.9000e-005
tblVehicleEF	MHD	7.5300e-004	3.0600e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.8600e-004	1.9900e-004
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.02	0.02

tblVehicleEF	MHD	0.29	0.04
tblVehicleEF	MHD	1.4920e-003	1.0890e-003
tblVehicleEF	MHD	0.01	9.9130e-003
tblVehicleEF	MHD	5.9500e-004	7.7000e-005
tblVehicleEF	MHD	7.5300e-004	3.0600e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	4.8600e-004	1.9900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	OBUS	0.01	6.6390e-003
tblVehicleEF	OBUS	5.3460e-003	3.7010e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.24	0.61
tblVehicleEF	OBUS	0.42	0.48
tblVehicleEF	OBUS	4.75	1.70
tblVehicleEF	OBUS	142.11	100.56
tblVehicleEF	OBUS	1,309.44	1,333.01
tblVehicleEF	OBUS	64.09	14.28
tblVehicleEF	OBUS	4.2880e-003	3.4080e-003
tblVehicleEF	OBUS	0.32	0.41
tblVehicleEF	OBUS	1.10	1.59
tblVehicleEF	OBUS	3.67	1.17
tblVehicleEF	OBUS	2.9000e-005	1.3400e-004
tblVehicleEF	OBUS	3.1040e-003	8.1250e-003
tblVehicleEF	OBUS	6.6000e-004	1.4000e-004

tblVehicleEF	OBUS	2.8000e-005	1.2900e-004
tblVehicleEF	OBUS	2.9580e-003	7.7640e-003
tblVehicleEF	OBUS	6.0600e-004	1.2900e-004
tblVehicleEF	OBUS	1.0980e-003	1.0910e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	6.0200e-004	5.6600e-004
tblVehicleEF	OBUS	0.05	0.03
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.30	0.08
tblVehicleEF	OBUS	1.3670e-003	9.5500e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.2400e-004	1.4100e-004
tblVehicleEF	OBUS	1.0980e-003	1.0910e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	6.0200e-004	5.6600e-004
tblVehicleEF	OBUS	0.06	0.03
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.33	0.09
tblVehicleEF	SBUS	0.81	0.16
tblVehicleEF	SBUS	9.8340e-003	3.3570e-003
tblVehicleEF	SBUS	0.06	0.01
tblVehicleEF	SBUS	8.09	5.87
tblVehicleEF	SBUS	0.59	0.28
tblVehicleEF	SBUS	7.19	1.80
tblVehicleEF	SBUS	1,103.84	390.07

tblVehicleEF	SBUS	1,057.81	932.50
tblVehicleEF	SBUS	57.01	11.79
tblVehicleEF	SBUS	9.4500e-004	1.0360e-003
tblVehicleEF	SBUS	7.90	2.10
tblVehicleEF	SBUS	3.38	1.47
tblVehicleEF	SBUS	11.83	1.21
tblVehicleEF	SBUS	7.0490e-003	1.4420e-003
tblVehicleEF	SBUS	0.01	9.6480e-003
tblVehicleEF	SBUS	0.02	9.6500e-003
tblVehicleEF	SBUS	6.8100e-004	1.4900e-004
tblVehicleEF	SBUS	6.7440e-003	1.3800e-003
tblVehicleEF	SBUS	2.6370e-003	2.4120e-003
tblVehicleEF	SBUS	0.02	9.2040e-003
tblVehicleEF	SBUS	6.2600e-004	1.3700e-004
tblVehicleEF	SBUS	2.7710e-003	1.1660e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.96	0.71
tblVehicleEF	SBUS	1.5500e-003	6.2300e-004
tblVehicleEF	SBUS	0.09	0.03
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.38	0.07
tblVehicleEF	SBUS	0.01	3.7520e-003
tblVehicleEF	SBUS	0.01	9.0210e-003
tblVehicleEF	SBUS	6.9400e-004	1.1700e-004
tblVehicleEF	SBUS	2.7710e-003	1.1660e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.38	1.03

tblVehicleEF	SBUS	1.5500e-003	6.2300e-004
tblVehicleEF	SBUS	0.11	0.04
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.42	0.08
tblVehicleEF	UBUS	0.42	1.38
tblVehicleEF	UBUS	0.05	0.00
tblVehicleEF	UBUS	8.65	10.31
tblVehicleEF	UBUS	9.26	0.00
tblVehicleEF	UBUS	2,259.15	1,709.68
tblVehicleEF	UBUS	65.85	0.00
tblVehicleEF	UBUS	3.5530e-003	6.4740e-003
tblVehicleEF	UBUS	15.81	0.75
tblVehicleEF	UBUS	17.18	0.00
tblVehicleEF	UBUS	0.69	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.30	5.4620e-003
tblVehicleEF	UBUS	1.1580e-003	0.00
tblVehicleEF	UBUS	0.29	0.03
tblVehicleEF	UBUS	3.0000e-003	8.6540e-003
tblVehicleEF	UBUS	0.29	5.2260e-003
tblVehicleEF	UBUS	1.0650e-003	0.00
tblVehicleEF	UBUS	3.1800e-003	0.00
tblVehicleEF	UBUS	0.08	0.00
tblVehicleEF	UBUS	1.5890e-003	0.00
tblVehicleEF	UBUS	1.27	0.02
tblVehicleEF	UBUS	0.03	0.00
tblVehicleEF	UBUS	0.62	0.00

tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	8.2300e-004	0.00
tblVehicleEF	UBUS	3.1800e-003	0.00
tblVehicleEF	UBUS	0.08	0.00
tblVehicleEF	UBUS	1.5890e-003	0.00
tblVehicleEF	UBUS	1.79	1.41
tblVehicleEF	UBUS	0.03	0.00
tblVehicleEF	UBUS	0.68	0.00
tblVehicleTrips	ST_TR	6.39	1.86
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	5.67	1.86
tblVehicleTrips	ST_TR	42.04	38.00
tblVehicleTrips	ST_TR	0.00	24.28
tblVehicleTrips	SU_TR	5.86	1.86
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	4.84	1.86
tblVehicleTrips	SU_TR	20.43	38.00
tblVehicleTrips	SU_TR	0.00	24.28
tblVehicleTrips	WD_TR	6.65	1.86
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	5.81	1.86
tblVehicleTrips	WD_TR	44.32	38.00
tblVehicleTrips	WD_TR	0.00	24.28
tblWoodstoves	NumberCatalytic	10.90	0.00
tblWoodstoves	NumberNoncatalytic	10.90	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021											0.0000	52.6306	52.6306	0.0144	0.0000	52.9903
Maximum											**0.0000**	**52.6306**	**52.6306**	**0.0144**	**0.0000**	**52.9903**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021											0.0000	52.6305	52.6305	0.0144	0.0000	52.9902
Maximum											**0.0000**	**52.6305**	**52.6305**	**0.0144**	**0.0000**	**52.9902**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											1.5597	20.3170	21.8767	0.0151	2.3000e-004	22.3215
Energy											0.0000	363.5983	363.5983	0.0590	0.0174	370.2660
Mobile											0.0000	887.2696	887.2696	0.0332	0.0000	888.0985
Stationary											0.0000	7.6540	7.6540	1.0700e-003	0.0000	7.6809
Waste											61.8960	0.0000	61.8960	3.6580	0.0000	153.3447
Water											13.5086	0.0000	13.5086	1.3920	0.0337	58.3468
Total											**76.9643**	**1,278.8390**	**1,355.8033**	**5.1582**	**0.0514**	**1,500.0584**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											1.5597	20.3170	21.8767	0.0151	2.3000e-004	22.3215
Energy											0.0000	363.5983	363.5983	0.0590	0.0174	370.2660
Mobile											0.0000	887.2696	887.2696	0.0332	0.0000	888.0985
Stationary											0.0000	7.6540	7.6540	1.0700e-003	0.0000	7.6809
Waste											61.8960	0.0000	61.8960	3.6580	0.0000	153.3447
Water											13.5086	0.0000	13.5086	1.3920	0.0337	58.3468
Total											**76.9643**	**1,278.8390**	**1,355.8033**	**5.1582**	**0.0514**	**1,500.0584**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	2/11/2021	5	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4.95

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total											**0.0000**	**51.0012**	**51.0012**	**0.0144**	**0.0000**	**51.3601**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.6294	1.6294	3.0000e-005	0.0000	1.6302
Total											**0.0000**	**1.6294**	**1.6294**	**3.0000e-005**	**0.0000**	**1.6302**

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total											**0.0000**	**51.0011**	**51.0011**	**0.0144**	**0.0000**	**51.3600**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.6294	1.6294	3.0000e-005	0.0000	1.6302
Total											**0.0000**	**1.6294**	**1.6294**	**3.0000e-005**	**0.0000**	**1.6302**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	887.2696	887.2696	0.0332	0.0000	888.0985
Unmitigated											0.0000	887.2696	887.2696	0.0332	0.0000	888.0985

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,013.70	1,013.70	1013.70	2,341,249	2,341,249
City Park	0.00	0.00	0.00		
Condo/Townhouse	186.00	186.00	186.00	429,587	429,587
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	285.00	285.00	285.00	438,909	438,909
User Defined Parking	0.00	0.00	0.00		
Total	1,484.70	1,484.70	1,484.70	3,209,745	3,209,745

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
User Defined Parking	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
City Park	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Condo/Townhouse	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Enclosed Parking with Elevator	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Strip Mall	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
User Defined Parking	0.179362	0.016959	0.053679	0.420000	0.000000	0.090000	0.190000	0.050000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Balboa Reservoir, Operational: Developer Option - Phase 1 - San Francisco County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	0.0000	0.0000	0.0520	0.0108	4.5070
Electricity Unmitigated											0.0000	0.0000	0.0000	0.0520	0.0108	4.5070
NaturalGas Mitigated											0.0000	363.5983	363.5983	6.9700e-003	6.6700e-003	365.7590
NaturalGas Unmitigated											0.0000	363.5983	363.5983	6.9700e-003	6.6700e-003	365.7590

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	4.60121e+006											0.0000	245.5383	245.5383	4.7100e-003	4.5000e-003	246.9974
City Park	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	2.17741e+006											0.0000	116.1950	116.1950	2.2300e-003	2.1300e-003	116.8854
Enclosed Parking with Elevator	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	34950											0.0000	1.8651	1.8651	4.0000e-005	3.0000e-005	1.8762
User Defined Parking	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**363.5983**	**363.5983**	**6.9800e-003**	**6.6600e-003**	**365.7590**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	4.60121e+006											0.0000	245.5383	245.5383	4.7100e-003	4.5000e-003	246.9974
City Park	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	2.17741e+006											0.0000	116.1950	116.1950	2.2300e-003	2.1300e-003	116.8854
Enclosed Parking with Elevator	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	34950											0.0000	1.8651	1.8651	4.0000e-005	3.0000e-005	1.8762
User Defined Parking	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**363.5983**	**363.5983**	**6.9800e-003**	**6.6600e-003**	**365.7590**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	2.23733e+006	0.0000	0.0294	6.0900e-003	2.5503
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	488007	0.0000	6.4200e-003	1.3300e-003	0.5563
Enclosed Parking with Elevator	1.15573e+006	0.0000	0.0152	3.1500e-003	1.3174
Strip Mall	72886.2	0.0000	9.6000e-004	2.0000e-004	0.0831
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0520**	**0.0108**	**4.5070**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	2.23733e+006	0.0000	0.0294	6.0900e-003	2.5503
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	488007	0.0000	6.4200e-003	1.3300e-003	0.5563
Enclosed Parking with Elevator	1.15573e+006	0.0000	0.0152	3.1500e-003	1.3174
Strip Mall	72886.2	0.0000	9.6000e-004	2.0000e-004	0.0831
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0520**	**0.0108**	**4.5070**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											1.5597	20.3170	21.8767	0.0151	2.3000e-004	22.3215
Unmitigated											1.5597	20.3170	21.8767	0.0151	2.3000e-004	22.3215

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											1.5597	12.4839	14.0436	7.5300e-003	2.3000e-004	14.3001
Landscaping											0.0000	7.8331	7.8331	7.5300e-003	0.0000	8.0214
Total											**1.5597**	**20.3170**	**21.8767**	**0.0151**	**2.3000e-004**	**22.3215**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											1.5597	12.4839	14.0436	7.5300e-003	2.3000e-004	14.3001
Landscaping											0.0000	7.8331	7.8331	7.5300e-003	0.0000	8.0214
Total											**1.5597**	**20.3170**	**21.8767**	**0.0151**	**2.3000e-004**	**22.3215**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	13.5086	1.3920	0.0337	58.3468
Unmitigated	13.5086	1.3920	0.0337	58.3468

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	35.5089 / 22.3861	11.2654	1.1606	0.0281	48.6417
City Park	0 / 4.76593	0.0000	2.2000e-004	5.0000e-005	0.0190
Condo/Townhouse	6.5154 / 4.10754	2.0670	0.2130	5.1500e-003	8.9251
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.555544 / 0.340495	0.1763	0.0182	4.4000e-004	0.7610
User Defined Parking	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**13.5086**	**1.3920**	**0.0337**	**58.3468**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	35.5089 / 22.3861	11.2654	1.1606	0.0281	48.6417
City Park	0 / 4.76593	0.0000	2.2000e-004	5.0000e-005	0.0190
Condo/Townhouse	6.5154 / 4.10754	2.0670	0.2130	5.1500e-003	8.9251
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.555544 / 0.340495	0.1763	0.0182	4.4000e-004	0.7610
User Defined Parking	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**13.5086**	**1.3920**	**0.0337**	**58.3468**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	61.8960	3.6580	0.0000	153.3447
Unmitigated	61.8960	3.6580	0.0000	153.3447

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	250.7	50.8898	3.0075	0.0000	126.0774
City Park	0.34	0.0690	4.0800e-003	0.0000	0.1710
Condo/Townhouse	46	9.3376	0.5518	0.0000	23.1335
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	7.88	1.5996	0.0945	0.0000	3.9629
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**61.8960**	**3.6580**	**0.0000**	**153.3447**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	250.7	50.8898	3.0075	0.0000	126.0774
City Park	0.34	0.0690	4.0800e-003	0.0000	0.1710
Condo/Townhouse	46	9.3376	0.5518	0.0000	23.1335
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	7.88	1.5996	0.0945	0.0000	3.9629
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**61.8960**	**3.6580**	**0.0000**	**153.3447**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	2	50	402	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (300 - 600 HP)											0.0000	7.6540	7.6540	1.0700e-003	0.0000	7.6809
Total											**0.0000**	**7.6540**	**7.6540**	**1.0700e-003**	**0.0000**	**7.6809**

11.0 Vegetation

Balboa Reservoir, Operational: Developer Option - Phase 2

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	10.00	1000sqft	0.23	10,000.00	0
Enclosed Parking with Elevator	750.00	Space	6.75	300,000.00	0
User Defined Parking	1.00	User Defined Unit	0.00	0.00	0
Apartments Mid Rise	455.00	Dwelling Unit	11.97	531,000.00	1301

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2027
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	258	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Balboa Reservoir, Operational: Developer Option - Phase 2 - San Francisco County, Annual

Project Characteristics - CO2 Intensity Factor is adjusted to account for RPS decreases.

Land Use - Residential square footage scaled based on total residential gross ksf, consistent with the Project description.

Construction Phase - Construction is evaluated separately.

Off-road Equipment -

Vehicle Trips - Operational trips based on May 145, 2019 Kittelson & Assoc traffic analysis.

Vehicle Emission Factors - Mobile emission factors updated based on EMFAC2017.

Vehicle Emission Factors - EMFAC 2017 for 2027

Vehicle Emission Factors - EMFAC 2017 for 2027

Woodstoves - Assumed no apartment fireplaces, per Project Sponsor.

Energy Use - For Apartments and Condos: Assumed 10% electricity and lighting energy reduction, and 4.7% natural gas energy reduction consistent with 2019 Title 24. For all other landuses, assumed 10.7% electricity and lighting energy reduction, and 1% natural gas ener

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	18000	4584
tblEnergyUse	LightingElect	741.44	667.30
tblEnergyUse	LightingElect	2.58	2.24
tblEnergyUse	LightingElect	2.63	1.56
tblEnergyUse	NT24E	3,277.06	3,054.10
tblEnergyUse	T24E	502.89	383.81
tblEnergyUse	T24E	0.69	0.59
tblEnergyUse	T24E	3.92	3.50
tblEnergyUse	T24NG	8,824.58	5,827.60
tblEnergyUse	T24NG	14.93	14.85
tblFireplaces	NumberGas	68.25	0.00
tblFireplaces	NumberNoFireplace	18.20	455.00
tblFireplaces	NumberWood	77.35	0.00
tblFleetMix	FleetMixLandUseSubType	Day-Care Center	Apartments Mid Rise

tblFleetMix	FleetMixLandUseSubType	Enclosed Parking with Elevator	Day-Care Center
tblFleetMix	FleetMixLandUseSubType	User Defined Parking	Enclosed Parking with Elevator
tblFleetMix	FleetMixLandUseSubType	Apartments Mid Rise	User Defined Parking
tblFleetMix	HHD	9.4710e-003	0.00
tblFleetMix	HHD	9.4710e-003	0.00
tblFleetMix	HHD	9.4710e-003	0.00
tblFleetMix	HHD	9.4710e-003	0.05
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.18
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.02
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.05
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD2	5.1840e-003	0.00
tblFleetMix	LHD2	5.1840e-003	0.00
tblFleetMix	LHD2	5.1840e-003	0.00
tblFleetMix	LHD2	5.1840e-003	0.09

tblFleetMix	MCY	5.9520e-003	0.00
tblFleetMix	MCY	5.9520e-003	0.00
tblFleetMix	MCY	5.9520e-003	0.00
tblFleetMix	MCY	5.9520e-003	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.42
tblFleetMix	MH	5.6100e-004	0.00
tblFleetMix	MH	5.6100e-004	0.00
tblFleetMix	MH	5.6100e-004	0.00
tblFleetMix	MH	5.6100e-004	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.19
tblFleetMix	OBUS	4.2720e-003	0.00
tblFleetMix	OBUS	4.2720e-003	0.00
tblFleetMix	OBUS	4.2720e-003	0.00
tblFleetMix	OBUS	4.2720e-003	0.00
tblFleetMix	SBUS	9.5600e-004	0.00
tblFleetMix	SBUS	9.5600e-004	0.00
tblFleetMix	SBUS	9.5600e-004	0.00
tblFleetMix	SBUS	9.5600e-004	0.00
tblFleetMix	UBUS	2.9830e-003	0.00
tblFleetMix	UBUS	2.9830e-003	0.00
tblFleetMix	UBUS	2.9830e-003	0.00

tblFleetMix	UBUS	2.9830e-003	0.00
tblLandUse	BuildingSpaceSquareFeet	455,000.00	531,000.00
tblLandUse	LandUseSquareFeet	455,000.00	531,000.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	258
tblProjectCharacteristics	OperationalYear	2018	2027
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	402.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	2.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	WorkerTripNumber	15.00	3.00
tblVehicleEF	HHD	0.44	0.05
tblVehicleEF	HHD	0.40	0.35
tblVehicleEF	HHD	0.06	1.0000e-006
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tblVehicleEF	HHD	5.25	0.01
tblVehicleEF	HHD	3,003.30	944.78
tblVehicleEF	HHD	1,824.55	1,827.00
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tblVehicleEF	HHD	9.4710e-003	8.5740e-003
tblVehicleEF	HHD	15.10	5.87
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tblVehicleEF	HHD	18.65	2.33
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tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	7.5960e-003	0.02

tblVehicleEF	HHD	1.7400e-004	2.0000e-006
tblVehicleEF	HHD	0.02	5.7060e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.5310e-003	8.7170e-003
tblVehicleEF	HHD	7.2670e-003	0.02
tblVehicleEF	HHD	1.6000e-004	2.0000e-006
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tblVehicleEF	HHD	7.8500e-004	2.4900e-004
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tblVehicleEF	HHD	6.9000e-005	4.0000e-006
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tblVehicleEF	HHD	0.03	0.03
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tblVehicleEF	HHD	0.03	0.03
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tblVehicleEF	HHD	0.03	0.03
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tblVehicleEF	LDA	0.07	0.09
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tblVehicleEF	LDA	0.04	0.05
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tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.04	0.05
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tblVehicleEF	LDA	0.04	0.06

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tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.01	0.01
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tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.05	0.07
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tblVehicleEF	LDT1	5.7740e-003	0.05
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tblVehicleEF	LDT1	1.36	2.29
tblVehicleEF	LDT1	278.99	301.05
tblVehicleEF	LDT1	60.02	60.36
tblVehicleEF	LDT1	0.04	0.05

tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.07	0.21
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tblVehicleEF	LDT1	2.4390e-003	1.9990e-003
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tblVehicleEF	LDT1	2.2430e-003	1.8380e-003
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.01	0.01
tblVehicleEF	LDT1	0.11	0.07
tblVehicleEF	LDT1	0.08	0.25
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tblVehicleEF	LDT1	6.2300e-004	5.9700e-004
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.11	0.07
tblVehicleEF	LDT1	0.09	0.28
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tblVehicleEF	LDT1	4.8220e-003	6.8970e-003
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tblVehicleEF	LDT1	0.04	0.06

tblVehicleEF	LDT1	0.06	0.09
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tblVehicleEF	LDT1	2.2430e-003	2.3800e-003
tblVehicleEF	LDT1	0.09	0.11
tblVehicleEF	LDT1	0.14	0.17
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.01	0.02
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.07	0.09
tblVehicleEF	LDT1	2.9680e-003	3.3070e-003
tblVehicleEF	LDT1	6.1800e-004	6.8600e-004
tblVehicleEF	LDT1	0.09	0.11
tblVehicleEF	LDT1	0.14	0.17
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.07	0.10
tblVehicleEF	LDT1	4.4250e-003	5.9110e-003
tblVehicleEF	LDT1	6.3510e-003	9.1220e-003
tblVehicleEF	LDT1	0.59	0.74
tblVehicleEF	LDT1	1.54	2.05
tblVehicleEF	LDT1	278.39	310.08
tblVehicleEF	LDT1	60.02	66.21
tblVehicleEF	LDT1	0.05	0.07
tblVehicleEF	LDT1	0.08	0.11

tblVehicleEF	LDT1	2.1360e-003	2.3520e-003
tblVehicleEF	LDT1	2.4390e-003	2.5880e-003
tblVehicleEF	LDT1	1.9650e-003	2.1640e-003
tblVehicleEF	LDT1	2.2430e-003	2.3800e-003
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.14	0.17
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.01	0.01
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.09	0.12
tblVehicleEF	LDT1	2.7880e-003	3.1070e-003
tblVehicleEF	LDT1	6.2600e-004	6.9700e-004
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.14	0.17
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.09	0.13
tblVehicleEF	LDT1	0.09	0.13
tblVehicleEF	LDT2	4.0670e-003	3.0070e-003
tblVehicleEF	LDT2	3.8900e-003	0.06
tblVehicleEF	LDT2	0.56	0.71
tblVehicleEF	LDT2	1.01	2.68
tblVehicleEF	LDT2	315.12	318.38
tblVehicleEF	LDT2	66.58	64.11
tblVehicleEF	LDT2	0.19	0.17

tblVehicleEF	LDT2	0.04	0.05
tblVehicleEF	LDT2	0.06	0.23
tblVehicleEF	LDT2	2.0530e-003	1.7430e-003
tblVehicleEF	LDT2	2.3100e-003	1.6970e-003
tblVehicleEF	LDT2	1.8880e-003	1.6040e-003
tblVehicleEF	LDT2	2.1240e-003	1.5600e-003
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.07	0.10
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.05	0.27
tblVehicleEF	LDT2	3.1540e-003	3.1490e-003
tblVehicleEF	LDT2	6.8200e-004	6.3400e-004
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.07	0.10
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.06	0.29
tblVehicleEF	LDT2	4.4360e-003	5.4610e-003
tblVehicleEF	LDT2	3.2750e-003	4.3540e-003
tblVehicleEF	LDT2	0.63	0.72
tblVehicleEF	LDT2	0.81	0.97
tblVehicleEF	LDT2	334.70	371.94
tblVehicleEF	LDT2	66.58	73.70
tblVehicleEF	LDT2	0.04	0.05

tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	2.0530e-003	2.1760e-003
tblVehicleEF	LDT2	2.3100e-003	2.3270e-003
tblVehicleEF	LDT2	1.8880e-003	2.0010e-003
tblVehicleEF	LDT2	2.1240e-003	2.1400e-003
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	3.3510e-003	3.7240e-003
tblVehicleEF	LDT2	6.7900e-004	7.5300e-004
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	4.0060e-003	4.9320e-003
tblVehicleEF	LDT2	4.2630e-003	5.7010e-003
tblVehicleEF	LDT2	0.56	0.64
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tblVehicleEF	LDT2	314.44	349.38
tblVehicleEF	LDT2	66.58	73.70
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.07	0.09

tblVehicleEF	LDT2	2.0530e-003	2.1760e-003
tblVehicleEF	LDT2	2.3100e-003	2.3270e-003
tblVehicleEF	LDT2	1.8880e-003	2.0010e-003
tblVehicleEF	LDT2	2.1240e-003	2.1400e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	9.9620e-003	0.01
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	3.1480e-003	3.4980e-003
tblVehicleEF	LDT2	6.8400e-004	7.6000e-004
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LHD1	4.9030e-003	5.7060e-003
tblVehicleEF	LHD1	9.7570e-003	6.6600e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.15	0.20
tblVehicleEF	LHD1	0.63	0.58
tblVehicleEF	LHD1	1.95	1.10
tblVehicleEF	LHD1	8.79	8.63

tblVehicleEF	LHD1	666.50	806.60
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tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.45	0.34
tblVehicleEF	LHD1	0.87	0.33
tblVehicleEF	LHD1	7.1700e-004	6.8000e-004
tblVehicleEF	LHD1	0.01	9.5380e-003
tblVehicleEF	LHD1	9.2180e-003	6.6230e-003
tblVehicleEF	LHD1	7.0000e-004	2.4000e-004
tblVehicleEF	LHD1	6.8600e-004	6.5100e-004
tblVehicleEF	LHD1	2.5410e-003	2.3840e-003
tblVehicleEF	LHD1	8.7840e-003	6.2890e-003
tblVehicleEF	LHD1	6.4400e-004	2.2100e-004
tblVehicleEF	LHD1	1.6780e-003	1.4240e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.1380e-003	9.2100e-004
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.27	0.16
tblVehicleEF	LHD1	0.19	0.07
tblVehicleEF	LHD1	8.8000e-005	8.4000e-005
tblVehicleEF	LHD1	6.5320e-003	7.8940e-003
tblVehicleEF	LHD1	3.5600e-004	1.2800e-004
tblVehicleEF	LHD1	1.6780e-003	1.4240e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.02	0.03

tblVehicleEF	LHD1	1.1380e-003	9.2100e-004
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.27	0.16
tblVehicleEF	LHD1	0.20	0.07
tblVehicleEF	LHD1	4.9030e-003	5.6310e-003
tblVehicleEF	LHD1	9.9900e-003	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.15	0.15
tblVehicleEF	LHD1	0.64	0.77
tblVehicleEF	LHD1	1.81	2.15
tblVehicleEF	LHD1	8.79	8.76
tblVehicleEF	LHD1	666.50	690.52
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tblVehicleEF	LHD1	0.43	0.57
tblVehicleEF	LHD1	0.80	0.95
tblVehicleEF	LHD1	7.1700e-004	7.0900e-004
tblVehicleEF	LHD1	0.01	9.9640e-003
tblVehicleEF	LHD1	9.2180e-003	9.9640e-003
tblVehicleEF	LHD1	7.0000e-004	8.1300e-004
tblVehicleEF	LHD1	6.8600e-004	6.7800e-004
tblVehicleEF	LHD1	2.5410e-003	2.4910e-003
tblVehicleEF	LHD1	8.7840e-003	9.4940e-003
tblVehicleEF	LHD1	6.4400e-004	7.4800e-004
tblVehicleEF	LHD1	3.2740e-003	3.7230e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.02	0.02

tblVehicleEF	LHD1	2.2070e-003	2.4410e-003
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	0.25	0.27
tblVehicleEF	LHD1	0.17	0.22
tblVehicleEF	LHD1	6.5330e-003	6.7850e-003
tblVehicleEF	LHD1	3.5400e-004	3.9200e-004
tblVehicleEF	LHD1	3.2740e-003	3.7230e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.2070e-003	2.4410e-003
tblVehicleEF	LHD1	0.11	0.12
tblVehicleEF	LHD1	0.25	0.27
tblVehicleEF	LHD1	0.19	0.24
tblVehicleEF	LHD1	4.9030e-003	5.6310e-003
tblVehicleEF	LHD1	9.6270e-003	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.15	0.15
tblVehicleEF	LHD1	0.63	0.74
tblVehicleEF	LHD1	2.06	2.46
tblVehicleEF	LHD1	8.79	8.76
tblVehicleEF	LHD1	666.50	690.52
tblVehicleEF	LHD1	32.01	35.12
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD1	0.46	0.62
tblVehicleEF	LHD1	0.91	1.08
tblVehicleEF	LHD1	7.1700e-004	7.0900e-004
tblVehicleEF	LHD1	0.01	9.9640e-003

tblVehicleEF	LHD1	9.2180e-003	9.9640e-003
tblVehicleEF	LHD1	7.0000e-004	8.1300e-004
tblVehicleEF	LHD1	6.8600e-004	6.7800e-004
tblVehicleEF	LHD1	2.5410e-003	2.4910e-003
tblVehicleEF	LHD1	8.7840e-003	9.4940e-003
tblVehicleEF	LHD1	6.4400e-004	7.4800e-004
tblVehicleEF	LHD1	1.0810e-003	1.1850e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	5.8600e-004	6.2900e-004
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	0.29	0.31
tblVehicleEF	LHD1	0.19	0.24
tblVehicleEF	LHD1	6.5320e-003	6.7840e-003
tblVehicleEF	LHD1	3.5800e-004	3.9700e-004
tblVehicleEF	LHD1	1.0810e-003	1.1850e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	5.8600e-004	6.2900e-004
tblVehicleEF	LHD1	0.11	0.11
tblVehicleEF	LHD1	0.29	0.31
tblVehicleEF	LHD1	0.29	0.31
tblVehicleEF	LHD1	0.21	0.27
tblVehicleEF	LHD1	0.21	0.27
tblVehicleEF	LHD2	2.8130e-003	3.3650e-003
tblVehicleEF	LHD2	5.7530e-003	6.0180e-003
tblVehicleEF	LHD2	4.0620e-003	7.6680e-003

tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.47	0.52
tblVehicleEF	LHD2	0.97	0.65
tblVehicleEF	LHD2	13.71	13.47
tblVehicleEF	LHD2	684.83	765.11
tblVehicleEF	LHD2	22.72	8.40
tblVehicleEF	LHD2	5.1840e-003	5.5390e-003
tblVehicleEF	LHD2	0.08	0.08
tblVehicleEF	LHD2	0.28	0.47
tblVehicleEF	LHD2	0.32	0.19
tblVehicleEF	LHD2	1.1150e-003	1.3540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7400e-004	1.2600e-004
tblVehicleEF	LHD2	1.0660e-003	1.2960e-003
tblVehicleEF	LHD2	2.7020e-003	2.6650e-003
tblVehicleEF	LHD2	9.6070e-003	0.01
tblVehicleEF	LHD2	3.4400e-004	1.1600e-004
tblVehicleEF	LHD2	4.7800e-004	8.0100e-004
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.3100e-004	5.0800e-004
tblVehicleEF	LHD2	0.09	0.10
tblVehicleEF	LHD2	0.05	0.09
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	1.3400e-004	1.2900e-004
tblVehicleEF	LHD2	6.6560e-003	7.3990e-003

tblVehicleEF	LHD2	2.4400e-004	8.3000e-005
tblVehicleEF	LHD2	4.7800e-004	8.0100e-004
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	3.3100e-004	5.0800e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.05	0.09
tblVehicleEF	LHD2	0.06	0.04
tblVehicleEF	LHD2	2.8130e-003	3.2090e-003
tblVehicleEF	LHD2	5.8110e-003	6.8030e-003
tblVehicleEF	LHD2	3.8740e-003	5.3080e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.47	0.51
tblVehicleEF	LHD2	0.90	1.03
tblVehicleEF	LHD2	13.71	13.84
tblVehicleEF	LHD2	684.83	698.44
tblVehicleEF	LHD2	22.72	23.92
tblVehicleEF	LHD2	0.08	0.09
tblVehicleEF	LHD2	0.27	0.42
tblVehicleEF	LHD2	0.30	0.38
tblVehicleEF	LHD2	1.1150e-003	1.1970e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7400e-004	3.9100e-004
tblVehicleEF	LHD2	1.0660e-003	1.1450e-003
tblVehicleEF	LHD2	2.7020e-003	2.6920e-003
tblVehicleEF	LHD2	9.6070e-003	0.01

tblVehicleEF	LHD2	3.4400e-004	3.5900e-004
tblVehicleEF	LHD2	9.4400e-004	1.1730e-003
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	6.5500e-004	7.7100e-004
tblVehicleEF	LHD2	0.09	0.10
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.05	0.07
tblVehicleEF	LHD2	1.3400e-004	1.3500e-004
tblVehicleEF	LHD2	6.6560e-003	6.7910e-003
tblVehicleEF	LHD2	2.4300e-004	2.5700e-004
tblVehicleEF	LHD2	9.4400e-004	1.1730e-003
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.5500e-004	7.7100e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.06	0.08
tblVehicleEF	LHD2	2.8130e-003	3.2090e-003
tblVehicleEF	LHD2	5.7210e-003	6.6590e-003
tblVehicleEF	LHD2	4.1800e-003	5.8010e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.46	0.50
tblVehicleEF	LHD2	1.02	1.17
tblVehicleEF	LHD2	13.71	13.84
tblVehicleEF	LHD2	684.83	698.44
tblVehicleEF	LHD2	22.72	23.92

tblVehicleEF	LHD2	0.08	0.09
tblVehicleEF	LHD2	0.29	0.45
tblVehicleEF	LHD2	0.33	0.42
tblVehicleEF	LHD2	1.1150e-003	1.1970e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7400e-004	3.9100e-004
tblVehicleEF	LHD2	1.0660e-003	1.1450e-003
tblVehicleEF	LHD2	2.7020e-003	2.6920e-003
tblVehicleEF	LHD2	9.6070e-003	0.01
tblVehicleEF	LHD2	3.4400e-004	3.5900e-004
tblVehicleEF	LHD2	3.0900e-004	3.6600e-004
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	1.6900e-004	1.9400e-004
tblVehicleEF	LHD2	0.09	0.10
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.06	0.08
tblVehicleEF	LHD2	1.3400e-004	1.3500e-004
tblVehicleEF	LHD2	6.6560e-003	6.7910e-003
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tblVehicleEF	LHD2	3.0900e-004	3.6600e-004
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.6900e-004	1.9400e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.06	0.07

tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.06	0.09
tblVehicleEF	LHD2	0.06	0.09
tblVehicleEF	MCY	0.57	0.40
tblVehicleEF	MCY	0.16	0.25
tblVehicleEF	MCY	19.84	20.63
tblVehicleEF	MCY	10.27	9.07
tblVehicleEF	MCY	194.23	229.85
tblVehicleEF	MCY	44.84	61.66
tblVehicleEF	MCY	5.9520e-003	7.1020e-003
tblVehicleEF	MCY	1.18	1.19
tblVehicleEF	MCY	0.32	0.28
tblVehicleEF	MCY	2.6190e-003	2.3850e-003
tblVehicleEF	MCY	3.5290e-003	2.9930e-003
tblVehicleEF	MCY	2.4450e-003	2.2300e-003
tblVehicleEF	MCY	3.3180e-003	2.8200e-003
tblVehicleEF	MCY	0.77	0.79
tblVehicleEF	MCY	0.73	0.78
tblVehicleEF	MCY	0.49	0.51
tblVehicleEF	MCY	2.75	2.80
tblVehicleEF	MCY	0.71	0.70
tblVehicleEF	MCY	2.21	1.99
tblVehicleEF	MCY	2.3500e-003	2.2750e-003
tblVehicleEF	MCY	6.8100e-004	6.1000e-004
tblVehicleEF	MCY	0.77	0.79
tblVehicleEF	MCY	0.73	0.78
tblVehicleEF	MCY	0.49	0.51

tblVehicleEF	MCY	3.42	3.47
tblVehicleEF	MCY	0.71	0.70
tblVehicleEF	MCY	2.40	2.16
tblVehicleEF	MCY	0.55	0.54
tblVehicleEF	MCY	0.13	0.14
tblVehicleEF	MCY	18.54	19.20
tblVehicleEF	MCY	8.87	8.83
tblVehicleEF	MCY	194.23	193.06
tblVehicleEF	MCY	44.84	46.00
tblVehicleEF	MCY	1.03	1.03
tblVehicleEF	MCY	0.29	0.30
tblVehicleEF	MCY	2.6190e-003	2.5080e-003
tblVehicleEF	MCY	3.5290e-003	3.7870e-003
tblVehicleEF	MCY	2.4450e-003	2.3460e-003
tblVehicleEF	MCY	3.3180e-003	3.5710e-003
tblVehicleEF	MCY	1.92	1.97
tblVehicleEF	MCY	0.87	0.93
tblVehicleEF	MCY	1.24	1.31
tblVehicleEF	MCY	2.64	2.68
tblVehicleEF	MCY	0.65	0.77
tblVehicleEF	MCY	1.84	1.87
tblVehicleEF	MCY	6.4700e-004	6.5900e-004
tblVehicleEF	MCY	1.92	1.97
tblVehicleEF	MCY	0.87	0.93
tblVehicleEF	MCY	1.24	1.31
tblVehicleEF	MCY	3.29	3.32
tblVehicleEF	MCY	0.65	0.77

tblVehicleEF	MCY	2.00	2.03
tblVehicleEF	MCY	0.58	0.58
tblVehicleEF	MCY	0.18	0.19
tblVehicleEF	MCY	21.03	21.90
tblVehicleEF	MCY	11.37	11.25
tblVehicleEF	MCY	194.23	193.06
tblVehicleEF	MCY	44.84	46.00
tblVehicleEF	MCY	1.25	1.26
tblVehicleEF	MCY	0.34	0.34
tblVehicleEF	MCY	2.6190e-003	2.5080e-003
tblVehicleEF	MCY	3.5290e-003	3.7870e-003
tblVehicleEF	MCY	2.4450e-003	2.3460e-003
tblVehicleEF	MCY	3.3180e-003	3.5710e-003
tblVehicleEF	MCY	0.34	0.35
tblVehicleEF	MCY	0.91	1.00
tblVehicleEF	MCY	0.21	0.21
tblVehicleEF	MCY	2.83	2.89
tblVehicleEF	MCY	0.84	0.99
tblVehicleEF	MCY	2.47	2.53
tblVehicleEF	MCY	2.3720e-003	2.3760e-003
tblVehicleEF	MCY	7.0700e-004	7.1900e-004
tblVehicleEF	MCY	0.34	0.35
tblVehicleEF	MCY	0.91	1.00
tblVehicleEF	MCY	0.21	0.21
tblVehicleEF	MCY	3.52	3.57
tblVehicleEF	MCY	0.84	0.99
tblVehicleEF	MCY	0.84	0.99

tblVehicleEF	MCY	2.69	2.76
tblVehicleEF	MCY	2.69	2.76
tblVehicleEF	MDV	5.6430e-003	3.0460e-003
tblVehicleEF	MDV	6.6600e-003	0.06
tblVehicleEF	MDV	0.68	0.69
tblVehicleEF	MDV	1.44	2.72
tblVehicleEF	MDV	417.67	375.26
tblVehicleEF	MDV	86.35	73.63
tblVehicleEF	MDV	0.09	0.11
tblVehicleEF	MDV	0.06	0.05
tblVehicleEF	MDV	0.10	0.23
tblVehicleEF	MDV	2.0890e-003	1.8270e-003
tblVehicleEF	MDV	2.2820e-003	1.7490e-003
tblVehicleEF	MDV	1.9240e-003	1.6850e-003
tblVehicleEF	MDV	2.0980e-003	1.6080e-003
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.10	0.09
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.01	0.01
tblVehicleEF	MDV	0.09	0.05
tblVehicleEF	MDV	0.09	0.27
tblVehicleEF	MDV	4.1750e-003	3.7080e-003
tblVehicleEF	MDV	8.8800e-004	7.2900e-004
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.10	0.09
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.02	0.02

tblVehicleEF	MDV	0.09	0.05
tblVehicleEF	MDV	0.10	0.30
tblVehicleEF	MDV	6.1460e-003	7.7670e-003
tblVehicleEF	MDV	5.5860e-003	7.5720e-003
tblVehicleEF	MDV	0.77	0.90
tblVehicleEF	MDV	1.14	1.41
tblVehicleEF	MDV	442.84	488.04
tblVehicleEF	MDV	86.35	94.54
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	2.0890e-003	2.2400e-003
tblVehicleEF	MDV	2.2820e-003	2.3440e-003
tblVehicleEF	MDV	1.9240e-003	2.0640e-003
tblVehicleEF	MDV	2.0980e-003	2.1550e-003
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.11	0.12
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	4.4280e-003	4.8810e-003
tblVehicleEF	MDV	8.8200e-004	9.6900e-004
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.11	0.12
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.08	0.08

tblVehicleEF	MDV	0.08	0.11
tblVehicleEF	MDV	5.5630e-003	7.0370e-003
tblVehicleEF	MDV	7.3120e-003	9.9480e-003
tblVehicleEF	MDV	0.68	0.80
tblVehicleEF	MDV	1.63	2.03
tblVehicleEF	MDV	416.79	459.24
tblVehicleEF	MDV	86.35	94.54
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.11	0.15
tblVehicleEF	MDV	2.0890e-003	2.2400e-003
tblVehicleEF	MDV	2.2820e-003	2.3440e-003
tblVehicleEF	MDV	1.9240e-003	2.0640e-003
tblVehicleEF	MDV	2.0980e-003	2.1550e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.11	0.12
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.01	0.02
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.10	0.13
tblVehicleEF	MDV	4.1670e-003	4.5920e-003
tblVehicleEF	MDV	8.9100e-004	9.8000e-004
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.11	0.12
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.11	0.11

tblVehicleEF	MDV	0.11	0.15
tblVehicleEF	MDV	0.11	0.15
tblVehicleEF	MH	0.01	7.9410e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.64	0.78
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tblVehicleEF	MH	1,178.74	1,444.02
tblVehicleEF	MH	56.30	17.21
tblVehicleEF	MH	5.6100e-004	5.8400e-004
tblVehicleEF	MH	0.73	0.98
tblVehicleEF	MH	0.57	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	7.9720e-003	0.01
tblVehicleEF	MH	9.4600e-004	2.8400e-004
tblVehicleEF	MH	3.2220e-003	3.2780e-003
tblVehicleEF	MH	7.5840e-003	0.01
tblVehicleEF	MH	8.7000e-004	2.6100e-004
tblVehicleEF	MH	0.27	0.38
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.12	0.15
tblVehicleEF	MH	0.04	0.05
tblVehicleEF	MH	9.0630e-003	9.9170e-003
tblVehicleEF	MH	0.21	0.08
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.2900e-004	1.7000e-004
tblVehicleEF	MH	0.27	0.38
tblVehicleEF	MH	0.03	0.04

tblVehicleEF	MH	0.12	0.15
tblVehicleEF	MH	0.05	0.07
tblVehicleEF	MH	9.0630e-003	9.9170e-003
tblVehicleEF	MH	0.23	0.09
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.01	0.02
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tblVehicleEF	MH	1,178.74	1,185.81
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tblVehicleEF	MH	0.69	0.78
tblVehicleEF	MH	0.52	0.57
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	7.9720e-003	0.01
tblVehicleEF	MH	9.4600e-004	1.0110e-003
tblVehicleEF	MH	3.2220e-003	3.2230e-003
tblVehicleEF	MH	7.5840e-003	0.01
tblVehicleEF	MH	8.7000e-004	9.3000e-004
tblVehicleEF	MH	0.55	0.70
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	0.26	0.30
tblVehicleEF	MH	0.04	0.06
tblVehicleEF	MH	8.7470e-003	0.01
tblVehicleEF	MH	0.20	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.2300e-004	6.3600e-004
tblVehicleEF	MH	0.55	0.70

tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	0.26	0.30
tblVehicleEF	MH	0.05	0.08
tblVehicleEF	MH	8.7470e-003	0.01
tblVehicleEF	MH	0.22	0.25
tblVehicleEF	MH	9.9460e-003	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.62	0.99
tblVehicleEF	MH	4.02	4.62
tblVehicleEF	MH	1,178.74	1,185.81
tblVehicleEF	MH	56.30	56.72
tblVehicleEF	MH	0.75	0.85
tblVehicleEF	MH	0.59	0.65
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tblVehicleEF	MH	7.9720e-003	0.01
tblVehicleEF	MH	9.4600e-004	1.0110e-003
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tblVehicleEF	MH	7.5840e-003	0.01
tblVehicleEF	MH	8.7000e-004	9.3000e-004
tblVehicleEF	MH	0.17	0.20
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.05	0.06
tblVehicleEF	MH	0.04	0.05
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tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.3200e-004	6.4700e-004

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tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.05	0.06
tblVehicleEF	MH	0.05	0.07
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tblVehicleEF	MH	9.7280e-003	0.01
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tblVehicleEF	MH	0.24	0.28
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tblVehicleEF	MHD	1.0700e-004	6.2700e-004
tblVehicleEF	MHD	3.0730e-003	6.7340e-003
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tblVehicleEF	MHD	5.9900e-004	3.0600e-004
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tblVehicleEF	MHD	4.1100e-004	1.9900e-004
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.01	0.02
tblVehicleEF	MHD	0.22	0.04
tblVehicleEF	MHD	1.5840e-003	1.0890e-003
tblVehicleEF	MHD	0.01	9.9130e-003
tblVehicleEF	MHD	5.1800e-004	7.7000e-005
tblVehicleEF	MHD	5.9900e-004	3.0600e-004
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	4.1100e-004	1.9900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.01	0.02
tblVehicleEF	MHD	0.24	0.04
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	2.7790e-003	3.5180e-003
tblVehicleEF	MHD	0.04	0.04
tblVehicleEF	MHD	0.20	0.22
tblVehicleEF	MHD	0.26	0.30
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tblVehicleEF	MHD	1.02	1.04
tblVehicleEF	MHD	12.81	12.00
tblVehicleEF	MHD	9.0000e-005	1.3400e-004
tblVehicleEF	MHD	3.0730e-003	3.1450e-003
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tblVehicleEF	MHD	8.6000e-005	1.2800e-004
tblVehicleEF	MHD	2.9370e-003	3.0060e-003
tblVehicleEF	MHD	5.4200e-004	6.6200e-004
tblVehicleEF	MHD	1.1970e-003	1.5510e-003
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	8.2800e-004	1.0170e-003
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tblVehicleEF	MHD	0.01	0.02
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tblVehicleEF	MHD	0.01	0.01
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tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	8.2800e-004	1.0170e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.01	0.02
tblVehicleEF	MHD	0.23	0.30
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.7270e-003	3.4210e-003

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tblVehicleEF	MHD	0.38	0.41
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tblVehicleEF	MHD	12.87	12.08
tblVehicleEF	MHD	1.3000e-004	1.9300e-004
tblVehicleEF	MHD	3.0730e-003	3.1450e-003
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tblVehicleEF	MHD	3.8100e-004	4.5200e-004
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.0600e-004	2.3200e-004
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tblVehicleEF	MHD	0.02	0.02
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.2100e-004	6.0000e-004
tblVehicleEF	MHD	3.8100e-004	4.5200e-004

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tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	2.0600e-004	2.3200e-004
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tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.24	0.61
tblVehicleEF	OBUS	0.37	0.48
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tblVehicleEF	OBUS	1.15	1.59
tblVehicleEF	OBUS	3.97	1.17
tblVehicleEF	OBUS	3.4000e-005	1.3400e-004
tblVehicleEF	OBUS	3.3220e-003	8.1250e-003
tblVehicleEF	OBUS	7.2500e-004	1.4000e-004
tblVehicleEF	OBUS	3.3000e-005	1.2900e-004
tblVehicleEF	OBUS	3.1660e-003	7.7640e-003
tblVehicleEF	OBUS	6.6600e-004	1.2900e-004

tblVehicleEF	OBUS	1.1130e-003	1.0910e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	6.1700e-004	5.6600e-004
tblVehicleEF	OBUS	0.05	0.03
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tblVehicleEF	OBUS	0.28	0.08
tblVehicleEF	OBUS	1.5540e-003	9.5500e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	6.9600e-004	1.4100e-004
tblVehicleEF	OBUS	1.1130e-003	1.0910e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	6.1700e-004	5.6600e-004
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tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.30	0.09
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tblVehicleEF	OBUS	4.4830e-003	5.4750e-003
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tblVehicleEF	OBUS	3.91	3.61
tblVehicleEF	OBUS	2.9000e-005	2.5000e-005
tblVehicleEF	OBUS	3.3220e-003	3.1040e-003
tblVehicleEF	OBUS	7.2500e-004	6.6000e-004
tblVehicleEF	OBUS	2.8000e-005	2.4000e-005
tblVehicleEF	OBUS	3.1660e-003	2.9580e-003
tblVehicleEF	OBUS	6.6600e-004	6.0600e-004
tblVehicleEF	OBUS	2.1200e-003	2.1040e-003
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tblVehicleEF	OBUS	0.05	0.05
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tblVehicleEF	OBUS	0.26	0.28
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tblVehicleEF	OBUS	1.2420e-003	1.2250e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.28	0.31
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.3470e-003	5.2770e-003

tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.26	0.25
tblVehicleEF	OBUS	0.37	0.42
tblVehicleEF	OBUS	4.51	5.01
tblVehicleEF	OBUS	149.76	131.74
tblVehicleEF	OBUS	1,301.27	1,309.44
tblVehicleEF	OBUS	62.08	64.09
tblVehicleEF	OBUS	0.36	0.31
tblVehicleEF	OBUS	1.17	1.12
tblVehicleEF	OBUS	4.00	3.71
tblVehicleEF	OBUS	4.2000e-005	3.6000e-005
tblVehicleEF	OBUS	3.3220e-003	3.1040e-003
tblVehicleEF	OBUS	7.2500e-004	6.6000e-004
tblVehicleEF	OBUS	4.0000e-005	3.4000e-005
tblVehicleEF	OBUS	3.1660e-003	2.9580e-003
tblVehicleEF	OBUS	6.6600e-004	6.0600e-004
tblVehicleEF	OBUS	8.0300e-004	7.8400e-004
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	2.8100e-004	2.7200e-004
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.29	0.32
tblVehicleEF	OBUS	1.4400e-003	1.2680e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.0000e-004	7.2900e-004
tblVehicleEF	OBUS	8.0300e-004	7.8400e-004

tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	2.8100e-004	2.7200e-004
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.31	0.35
tblVehicleEF	OBUS	0.31	0.35
tblVehicleEF	SBUS	0.80	0.16
tblVehicleEF	SBUS	7.5620e-003	3.3570e-003
tblVehicleEF	SBUS	0.06	0.01
tblVehicleEF	SBUS	8.27	5.87
tblVehicleEF	SBUS	0.47	0.28
tblVehicleEF	SBUS	6.79	1.80
tblVehicleEF	SBUS	1,073.75	390.07
tblVehicleEF	SBUS	1,044.82	932.50
tblVehicleEF	SBUS	58.74	11.79
tblVehicleEF	SBUS	9.5600e-004	1.0360e-003
tblVehicleEF	SBUS	6.13	2.10
tblVehicleEF	SBUS	2.50	1.47
tblVehicleEF	SBUS	11.44	1.21
tblVehicleEF	SBUS	4.2990e-003	1.4420e-003
tblVehicleEF	SBUS	0.01	9.6480e-003
tblVehicleEF	SBUS	0.01	9.6500e-003
tblVehicleEF	SBUS	7.7000e-004	1.4900e-004
tblVehicleEF	SBUS	4.1130e-003	1.3800e-003
tblVehicleEF	SBUS	2.6290e-003	2.4120e-003

tblVehicleEF	SBUS	0.01	9.2040e-003
tblVehicleEF	SBUS	7.0800e-004	1.3700e-004
tblVehicleEF	SBUS	3.1740e-003	1.1660e-003
tblVehicleEF	SBUS	0.04	0.01
tblVehicleEF	SBUS	0.97	0.71
tblVehicleEF	SBUS	1.8100e-003	6.2300e-004
tblVehicleEF	SBUS	0.08	0.03
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.37	0.07
tblVehicleEF	SBUS	0.01	3.7520e-003
tblVehicleEF	SBUS	0.01	9.0210e-003
tblVehicleEF	SBUS	7.0500e-004	1.1700e-004
tblVehicleEF	SBUS	3.1740e-003	1.1660e-003
tblVehicleEF	SBUS	0.04	0.01
tblVehicleEF	SBUS	1.41	1.03
tblVehicleEF	SBUS	1.8100e-003	6.2300e-004
tblVehicleEF	SBUS	0.09	0.04
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.40	0.08
tblVehicleEF	SBUS	0.80	0.81
tblVehicleEF	SBUS	7.7250e-003	0.01
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	8.19	8.00
tblVehicleEF	SBUS	0.48	0.61
tblVehicleEF	SBUS	5.15	5.45
tblVehicleEF	SBUS	1,120.33	1,152.72
tblVehicleEF	SBUS	1,044.82	1,057.81

tblVehicleEF	SBUS	58.74	57.01
tblVehicleEF	SBUS	6.32	8.15
tblVehicleEF	SBUS	2.38	3.22
tblVehicleEF	SBUS	11.40	11.79
tblVehicleEF	SBUS	3.6240e-003	5.9420e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	7.7000e-004	6.8100e-004
tblVehicleEF	SBUS	3.4670e-003	5.6850e-003
tblVehicleEF	SBUS	2.6290e-003	2.6370e-003
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	7.0800e-004	6.2600e-004
tblVehicleEF	SBUS	5.9580e-003	5.2560e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.97	0.95
tblVehicleEF	SBUS	3.5880e-003	3.1210e-003
tblVehicleEF	SBUS	0.08	0.09
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.31	0.33
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.7800e-004	6.6500e-004
tblVehicleEF	SBUS	5.9580e-003	5.2560e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	1.41	1.38
tblVehicleEF	SBUS	3.5880e-003	3.1210e-003
tblVehicleEF	SBUS	0.09	0.11

tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.34	0.36
tblVehicleEF	SBUS	0.80	0.81
tblVehicleEF	SBUS	7.4710e-003	9.7060e-003
tblVehicleEF	SBUS	0.06	0.07
tblVehicleEF	SBUS	8.38	8.23
tblVehicleEF	SBUS	0.47	0.59
tblVehicleEF	SBUS	8.03	8.50
tblVehicleEF	SBUS	1,009.42	1,036.35
tblVehicleEF	SBUS	1,044.82	1,057.81
tblVehicleEF	SBUS	58.74	57.01
tblVehicleEF	SBUS	5.86	7.55
tblVehicleEF	SBUS	2.54	3.43
tblVehicleEF	SBUS	11.46	11.86
tblVehicleEF	SBUS	5.2310e-003	8.5770e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	7.7000e-004	6.8100e-004
tblVehicleEF	SBUS	5.0040e-003	8.2060e-003
tblVehicleEF	SBUS	2.6290e-003	2.6370e-003
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	7.0800e-004	6.2600e-004
tblVehicleEF	SBUS	2.3540e-003	2.0200e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.98	0.96
tblVehicleEF	SBUS	8.3900e-004	7.1100e-004
tblVehicleEF	SBUS	0.08	0.09

tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.41	0.42
tblVehicleEF	SBUS	9.9230e-003	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	7.2600e-004	7.1600e-004
tblVehicleEF	SBUS	2.3540e-003	2.0200e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	1.41	1.39
tblVehicleEF	SBUS	8.3900e-004	7.1100e-004
tblVehicleEF	SBUS	0.09	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.44	0.46
tblVehicleEF	SBUS	0.44	0.46
tblVehicleEF	UBUS	0.41	1.38
tblVehicleEF	UBUS	0.05	0.00
tblVehicleEF	UBUS	8.11	10.31
tblVehicleEF	UBUS	9.86	0.00
tblVehicleEF	UBUS	2,200.22	1,709.68
tblVehicleEF	UBUS	79.12	0.00
tblVehicleEF	UBUS	2.9830e-003	6.4740e-003
tblVehicleEF	UBUS	13.89	0.75
tblVehicleEF	UBUS	16.33	0.00
tblVehicleEF	UBUS	0.65	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.26	5.4620e-003
tblVehicleEF	UBUS	1.3150e-003	0.00

tblVehicleEF	UBUS	0.28	0.03
tblVehicleEF	UBUS	3.0000e-003	8.6540e-003
tblVehicleEF	UBUS	0.25	5.2260e-003
tblVehicleEF	UBUS	1.2090e-003	0.00
tblVehicleEF	UBUS	3.4350e-003	0.00
tblVehicleEF	UBUS	0.08	0.00
tblVehicleEF	UBUS	1.8030e-003	0.00
tblVehicleEF	UBUS	1.15	0.02
tblVehicleEF	UBUS	0.04	0.00
tblVehicleEF	UBUS	0.68	0.00
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	9.6700e-004	0.00
tblVehicleEF	UBUS	3.4350e-003	0.00
tblVehicleEF	UBUS	0.08	0.00
tblVehicleEF	UBUS	1.8030e-003	0.00
tblVehicleEF	UBUS	1.65	1.41
tblVehicleEF	UBUS	0.04	0.00
tblVehicleEF	UBUS	0.75	0.00
tblVehicleEF	UBUS	0.43	0.43
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	8.26	8.80
tblVehicleEF	UBUS	7.57	7.07
tblVehicleEF	UBUS	2,200.22	2,259.15
tblVehicleEF	UBUS	79.12	65.85
tblVehicleEF	UBUS	13.26	15.09
tblVehicleEF	UBUS	16.25	17.12
tblVehicleEF	UBUS	0.65	0.69

tblVehicleEF	UBUS	0.26	0.30
tblVehicleEF	UBUS	1.3150e-003	1.1580e-003
tblVehicleEF	UBUS	0.28	0.29
tblVehicleEF	UBUS	0.25	0.29
tblVehicleEF	UBUS	1.2090e-003	1.0650e-003
tblVehicleEF	UBUS	7.0130e-003	6.5610e-003
tblVehicleEF	UBUS	0.09	0.08
tblVehicleEF	UBUS	3.6960e-003	3.2820e-003
tblVehicleEF	UBUS	1.18	1.30
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	0.57	0.51
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	9.2700e-004	7.8500e-004
tblVehicleEF	UBUS	7.0130e-003	6.5610e-003
tblVehicleEF	UBUS	0.09	0.08
tblVehicleEF	UBUS	3.6960e-003	3.2820e-003
tblVehicleEF	UBUS	1.70	1.84
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	0.62	0.56
tblVehicleEF	UBUS	0.41	0.41
tblVehicleEF	UBUS	0.06	0.05
tblVehicleEF	UBUS	8.04	8.57
tblVehicleEF	UBUS	11.58	10.92
tblVehicleEF	UBUS	2,200.22	2,259.15
tblVehicleEF	UBUS	79.12	65.85
tblVehicleEF	UBUS	14.10	16.05
tblVehicleEF	UBUS	16.37	17.22

tblVehicleEF	UBUS	0.65	0.69
tblVehicleEF	UBUS	0.26	0.30
tblVehicleEF	UBUS	1.3150e-003	1.1580e-003
tblVehicleEF	UBUS	0.28	0.29
tblVehicleEF	UBUS	0.25	0.29
tblVehicleEF	UBUS	1.2090e-003	1.0650e-003
tblVehicleEF	UBUS	2.0120e-003	1.7960e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	6.6800e-004	5.5600e-004
tblVehicleEF	UBUS	1.13	1.25
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	0.76	0.69
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	9.9700e-004	8.5200e-004
tblVehicleEF	UBUS	2.0120e-003	1.7960e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	6.6800e-004	5.5600e-004
tblVehicleEF	UBUS	1.63	1.77
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	0.83	0.76
tblVehicleEF	UBUS	0.83	0.76
tblVehicleTrips	CC_TTP	82.30	48.00
tblVehicleTrips	CC_TTP	0.00	48.00
tblVehicleTrips	CNW_TTP	5.00	19.00
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CW_TTP	12.70	33.00

tblVehicleTrips	CW_TTP	0.00	33.00
tblVehicleTrips	DV_TP	58.00	28.00
tblVehicleTrips	DV_TP	0.00	28.00
tblVehicleTrips	PB_TP	14.00	6.00
tblVehicleTrips	PB_TP	0.00	6.00
tblVehicleTrips	PR_TP	28.00	66.00
tblVehicleTrips	PR_TP	0.00	66.00
tblVehicleTrips	ST_TR	6.39	1.86
tblVehicleTrips	ST_TR	6.21	7.10
tblVehicleTrips	ST_TR	0.00	16.93
tblVehicleTrips	SU_TR	5.86	1.86
tblVehicleTrips	SU_TR	5.83	7.10
tblVehicleTrips	SU_TR	0.00	16.93
tblVehicleTrips	WD_TR	6.65	1.86
tblVehicleTrips	WD_TR	74.06	7.10
tblVehicleTrips	WD_TR	0.00	16.93
tblWoodstoves	NumberCatalytic	9.10	0.00
tblWoodstoves	NumberNoncatalytic	9.10	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021											0.0000	34.2180	34.2180	9.5700e-003	0.0000	34.4574
Maximum											**0.0000**	**34.2180**	**34.2180**	**9.5700e-003**	**0.0000**	**34.4574**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021											0.0000	34.2180	34.2180	9.5700e-003	0.0000	34.4574
Maximum											**0.0000**	**34.2180**	**34.2180**	**9.5700e-003**	**0.0000**	**34.4574**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	5.5322	5.5322	5.3200e-003	0.0000	5.6652
Energy											0.0000	621.6027	621.6027	0.0499	0.0134	626.8454
Mobile											0.0000	602.8628	602.8628	0.0218	0.0000	603.4067
Stationary											0.0000	7.6540	7.6540	1.0700e-003	0.0000	7.6809
Waste											45.1249	0.0000	45.1249	2.6668	0.0000	111.7950
Water											9.5411	27.1506	36.6917	0.9830	0.0238	68.3506
Total											**54.6660**	**1,264.8023**	**1,319.4683**	**3.7279**	**0.0372**	**1,423.7437**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	5.5322	5.5322	5.3200e-003	0.0000	5.6652
Energy											0.0000	621.6027	621.6027	0.0499	0.0134	626.8454
Mobile											0.0000	602.8628	602.8628	0.0218	0.0000	603.4067
Stationary											0.0000	7.6540	7.6540	1.0700e-003	0.0000	7.6809
Waste											45.1249	0.0000	45.1249	2.6668	0.0000	111.7950
Water											9.5411	27.1506	36.6917	0.9830	0.0238	68.3506
Total											**54.6660**	**1,264.8023**	**1,319.4683**	**3.7279**	**0.0372**	**1,423.7437**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	1/28/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 6.75

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	34.0008	34.0008	9.5700e-003	0.0000	34.2400
Total											**0.0000**	**34.0008**	**34.0008**	**9.5700e-003**	**0.0000**	**34.2400**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2173	0.2173	0.0000	0.0000	0.2174
Total											**0.0000**	**0.2173**	**0.2173**	**0.0000**	**0.0000**	**0.2174**

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	34.0007	34.0007	9.5700e-003	0.0000	34.2400
Total											**0.0000**	**34.0007**	**34.0007**	**9.5700e-003**	**0.0000**	**34.2400**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2173	0.2173	0.0000	0.0000	0.2174
Total											**0.0000**	**0.2173**	**0.2173**	**0.0000**	**0.0000**	**0.2174**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	602.8628	602.8628	0.0218	0.0000	603.4067
Unmitigated											0.0000	602.8628	602.8628	0.0218	0.0000	603.4067

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	846.30	846.30	846.30	1,954,621	1,954,621
Day-Care Center	71.00	71.00	71.00	151,575	151,575
Enclosed Parking with Elevator	0.00	0.00	0.00		
User Defined Parking	16.93	16.93	16.93	36,143	36,143
Total	934.23	934.23	934.23	2,142,338	2,142,338

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Day-Care Center	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
User Defined Parking	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Day-Care Center	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Enclosed Parking with Elevator	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
User Defined Parking	0.179362	0.016959	0.053679	0.420000	0.000000	0.090000	0.190000	0.050000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	407.8230	407.8230	0.0458	9.4800e-003	411.7953
Electricity Unmitigated											0.0000	407.8230	407.8230	0.0458	9.4800e-003	411.7953
NaturalGas Mitigated											0.0000	213.7797	213.7797	4.1000e-003	3.9200e-003	215.0501
NaturalGas Unmitigated											0.0000	213.7797	213.7797	4.1000e-003	3.9200e-003	215.0501

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.84138e+006											0.0000	204.9907	204.9907	3.9300e-003	3.7600e-003	206.2089
Day-Care Center	164700											0.0000	8.7890	8.7890	1.7000e-004	1.6000e-004	8.8413
Enclosed Parking with Elevator	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**213.7797**	**213.7797**	**4.1000e-003**	**3.9200e-003**	**215.0501**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.84138e+006											0.0000	204.9907	204.9907	3.9300e-003	3.7600e-003	206.2089
Day-Care Center	164700											0.0000	8.7890	8.7890	1.7000e-004	1.6000e-004	8.8413
Enclosed Parking with Elevator	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**213.7797**	**213.7797**	**4.1000e-003**	**3.9200e-003**	**215.0501**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.86787e+006	218.5905	0.0246	5.0800e-003	220.7196
Day-Care Center	41008.1	4.7991	5.4000e-004	1.1000e-004	4.8458
Enclosed Parking with Elevator	1.57599e+006	184.4335	0.0207	4.2900e-003	186.2299
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**407.8230**	**0.0458**	**9.4800e-003**	**411.7953**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.86787e+006	218.5905	0.0246	5.0800e-003	220.7196
Day-Care Center	41008.1	4.7991	5.4000e-004	1.1000e-004	4.8458
Enclosed Parking with Elevator	1.57599e+006	184.4335	0.0207	4.2900e-003	186.2299
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**407.8230**	**0.0458**	**9.4800e-003**	**411.7953**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	5.5322	5.5322	5.3200e-003	0.0000	5.6652
Unmitigated											0.0000	5.5322	5.5322	5.3200e-003	0.0000	5.6652

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	5.5322	5.5322	5.3200e-003	0.0000	5.6652
Total											**0.0000**	**5.5322**	**5.5322**	**5.3200e-003**	**0.0000**	**5.6652**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	5.5322	5.5322	5.3200e-003	0.0000	5.6652
Total											**0.0000**	**5.5322**	**5.5322**	**5.3200e-003**	**0.0000**	**5.6652**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	36.6917	0.9830	0.0238	68.3506
Unmitigated	36.6917	0.9830	0.0238	68.3506

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	29.6451 / 18.6893	35.8323	0.9690	0.0234	67.0364
Day-Care Center	0.428896 / 1.10287	0.8594	0.0141	3.5000e-004	1.3142
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**36.6917**	**0.9830**	**0.0238**	**68.3506**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	29.6451 / 18.6893	35.8323	0.9690	0.0234	67.0364
Day-Care Center	0.428896 / 1.10287	0.8594	0.0141	3.5000e-004	1.3142
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**36.6917**	**0.9830**	**0.0238**	**68.3506**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	45.1249	2.6668	0.0000	111.7950
Unmitigated	45.1249	2.6668	0.0000	111.7950

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	209.3	42.4860	2.5109	0.0000	105.2573
Day-Care Center	13	2.6389	0.1560	0.0000	6.5377
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**45.1249**	**2.6668**	**0.0000**	**111.7950**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	209.3	42.4860	2.5109	0.0000	105.2573
Day-Care Center	13	2.6389	0.1560	0.0000	6.5377
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**45.1249**	**2.6668**	**0.0000**	**111.7950**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	2	50	402	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (300 - 600 HP)											0.0000	7.6540	7.6540	1.0700e-003	0.0000	7.6809
Total											**0.0000**	**7.6540**	**7.6540**	**1.0700e-003**	**0.0000**	**7.6809**

11.0 Vegetation

Balboa Reservoir, Operational: Developer Option - Phase 2

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	10.00	1000sqft	0.23	10,000.00	0
Enclosed Parking with Elevator	750.00	Space	6.75	300,000.00	0
User Defined Parking	1.00	User Defined Unit	0.00	0.00	0
Apartments Mid Rise	455.00	Dwelling Unit	11.97	531,000.00	1301

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2027
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Balboa Reservoir, Operational: Developer Option - Phase 2 - San Francisco County, Annual

Project Characteristics - CO2 Intensity Factor is adjusted to account for RPS decreases.

Land Use - Residential square footage scaled based on total residential gross ksf, consistent with the Project description.

Construction Phase - Construction is evaluated separately.

Off-road Equipment -

Vehicle Trips - Operational trips based on May 14, 2019 Kittelson & Assoc traffic analysis.

Vehicle Emission Factors - Mobile emission factors updated based on EMFAC2017.

Vehicle Emission Factors - EMFAC 2017 for 2027

Vehicle Emission Factors - EMFAC 2017 for 2027

Woodstoves - Assumed no apartment fireplaces, per Project Sponsor.

Energy Use - For Apartments and Condos: Assumed 10% electricity and lighting energy reduction, and 4.7% natural gas energy reduction consistent with 2019 Title 24. For all other landuses, assumed 10.7% electricity and lighting energy reduction, and 1% natural gas ener

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	18000	4584
tblEnergyUse	LightingElect	741.44	667.30
tblEnergyUse	LightingElect	2.58	2.24
tblEnergyUse	LightingElect	2.63	1.56
tblEnergyUse	NT24E	3,277.06	3,054.10
tblEnergyUse	T24E	502.89	383.81
tblEnergyUse	T24E	0.69	0.59
tblEnergyUse	T24E	3.92	3.50
tblEnergyUse	T24NG	8,824.58	5,827.60
tblEnergyUse	T24NG	14.93	14.85
tblFireplaces	NumberGas	68.25	0.00
tblFireplaces	NumberNoFireplace	18.20	455.00
tblFireplaces	NumberWood	77.35	0.00
tblFleetMix	FleetMixLandUseSubType	Day-Care Center	Apartments Mid Rise

tblFleetMix	FleetMixLandUseSubType	Enclosed Parking with Elevator	Day-Care Center
tblFleetMix	FleetMixLandUseSubType	User Defined Parking	Enclosed Parking with Elevator
tblFleetMix	FleetMixLandUseSubType	Apartments Mid Rise	User Defined Parking
tblFleetMix	HHD	9.4710e-003	0.00
tblFleetMix	HHD	9.4710e-003	0.00
tblFleetMix	HHD	9.4710e-003	0.00
tblFleetMix	HHD	9.4710e-003	0.05
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.18
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.02
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.05
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD2	5.1840e-003	0.00
tblFleetMix	LHD2	5.1840e-003	0.00
tblFleetMix	LHD2	5.1840e-003	0.00
tblFleetMix	LHD2	5.1840e-003	0.09

tblFleetMix	MCY	5.9520e-003	0.00
tblFleetMix	MCY	5.9520e-003	0.00
tblFleetMix	MCY	5.9520e-003	0.00
tblFleetMix	MCY	5.9520e-003	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.42
tblFleetMix	MH	5.6100e-004	0.00
tblFleetMix	MH	5.6100e-004	0.00
tblFleetMix	MH	5.6100e-004	0.00
tblFleetMix	MH	5.6100e-004	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.19
tblFleetMix	OBUS	4.2720e-003	0.00
tblFleetMix	OBUS	4.2720e-003	0.00
tblFleetMix	OBUS	4.2720e-003	0.00
tblFleetMix	OBUS	4.2720e-003	0.00
tblFleetMix	SBUS	9.5600e-004	0.00
tblFleetMix	SBUS	9.5600e-004	0.00
tblFleetMix	SBUS	9.5600e-004	0.00
tblFleetMix	SBUS	9.5600e-004	0.00
tblFleetMix	UBUS	2.9830e-003	0.00
tblFleetMix	UBUS	2.9830e-003	0.00
tblFleetMix	UBUS	2.9830e-003	0.00

tblFleetMix	UBUS	2.9830e-003	0.00
tblLandUse	BuildingSpaceSquareFeet	455,000.00	531,000.00
tblLandUse	LandUseSquareFeet	455,000.00	531,000.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	0
tblProjectCharacteristics	OperationalYear	2018	2027
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	402.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	2.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	WorkerTripNumber	15.00	3.00
tblVehicleEF	HHD	0.44	0.05
tblVehicleEF	HHD	0.40	0.35
tblVehicleEF	HHD	0.06	1.0000e-006
tblVehicleEF	HHD	1.53	4.91
tblVehicleEF	HHD	2.41	1.39
tblVehicleEF	HHD	5.25	0.01
tblVehicleEF	HHD	3,003.30	944.78
tblVehicleEF	HHD	1,824.55	1,827.00
tblVehicleEF	HHD	16.29	0.11
tblVehicleEF	HHD	9.4710e-003	8.5740e-003
tblVehicleEF	HHD	15.10	5.87
tblVehicleEF	HHD	2.58	3.67
tblVehicleEF	HHD	18.65	2.33
tblVehicleEF	HHD	0.02	5.9640e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	7.5960e-003	0.02

tblVehicleEF	HHD	1.7400e-004	2.0000e-006
tblVehicleEF	HHD	0.02	5.7060e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.5310e-003	8.7170e-003
tblVehicleEF	HHD	7.2670e-003	0.02
tblVehicleEF	HHD	1.6000e-004	2.0000e-006
tblVehicleEF	HHD	9.4000e-005	6.0000e-006
tblVehicleEF	HHD	4.7710e-003	3.5600e-004
tblVehicleEF	HHD	0.34	0.33
tblVehicleEF	HHD	6.9000e-005	4.0000e-006
tblVehicleEF	HHD	0.09	0.04
tblVehicleEF	HHD	7.8500e-004	2.4900e-004
tblVehicleEF	HHD	0.09	6.0000e-006
tblVehicleEF	HHD	0.02	7.9910e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	2.4800e-004	1.0000e-006
tblVehicleEF	HHD	9.4000e-005	6.0000e-006
tblVehicleEF	HHD	4.7710e-003	3.5600e-004
tblVehicleEF	HHD	0.42	0.40
tblVehicleEF	HHD	6.9000e-005	4.0000e-006
tblVehicleEF	HHD	0.50	0.40
tblVehicleEF	HHD	7.8500e-004	2.4900e-004
tblVehicleEF	HHD	0.10	6.0000e-006
tblVehicleEF	HHD	0.42	0.53
tblVehicleEF	HHD	0.40	0.38
tblVehicleEF	HHD	0.05	0.06
tblVehicleEF	HHD	1.11	1.27

tblVehicleEF	HHD	2.43	2.23
tblVehicleEF	HHD	4.80	4.12
tblVehicleEF	HHD	3,181.73	3,320.71
tblVehicleEF	HHD	1,824.55	1,887.93
tblVehicleEF	HHD	16.29	14.15
tblVehicleEF	HHD	15.59	18.25
tblVehicleEF	HHD	2.47	2.89
tblVehicleEF	HHD	18.62	18.96
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	7.5960e-003	8.4530e-003
tblVehicleEF	HHD	1.7400e-004	1.4500e-004
tblVehicleEF	HHD	0.01	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	7.2670e-003	8.0860e-003
tblVehicleEF	HHD	1.6000e-004	1.3300e-004
tblVehicleEF	HHD	1.8800e-004	1.6600e-004
tblVehicleEF	HHD	5.0510e-003	4.3660e-003
tblVehicleEF	HHD	0.32	0.36
tblVehicleEF	HHD	1.4100e-004	1.2200e-004
tblVehicleEF	HHD	0.09	0.10
tblVehicleEF	HHD	7.4300e-004	6.3700e-004
tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.01	0.02
tblVehicleEF	HHD	2.4100e-004	2.0900e-004

tblVehicleEF	HHD	1.8800e-004	1.6600e-004
tblVehicleEF	HHD	5.0510e-003	4.3660e-003
tblVehicleEF	HHD	0.40	0.45
tblVehicleEF	HHD	1.4100e-004	1.2200e-004
tblVehicleEF	HHD	0.50	0.48
tblVehicleEF	HHD	7.4300e-004	6.3700e-004
tblVehicleEF	HHD	0.10	0.09
tblVehicleEF	HHD	0.48	0.60
tblVehicleEF	HHD	0.40	0.38
tblVehicleEF	HHD	0.06	0.07
tblVehicleEF	HHD	2.11	2.40
tblVehicleEF	HHD	2.39	2.20
tblVehicleEF	HHD	5.55	4.77
tblVehicleEF	HHD	2,756.90	2,877.32
tblVehicleEF	HHD	1,824.55	1,887.93
tblVehicleEF	HHD	16.29	14.15
tblVehicleEF	HHD	14.43	16.89
tblVehicleEF	HHD	2.62	3.07
tblVehicleEF	HHD	18.66	19.00
tblVehicleEF	HHD	0.02	0.03
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	7.5960e-003	8.4530e-003
tblVehicleEF	HHD	1.7400e-004	1.4500e-004
tblVehicleEF	HHD	0.02	0.03
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	7.2670e-003	8.0860e-003

tblVehicleEF	HHD	1.6000e-004	1.3300e-004
tblVehicleEF	HHD	6.2000e-005	4.9000e-005
tblVehicleEF	HHD	4.9960e-003	4.3680e-003
tblVehicleEF	HHD	0.36	0.42
tblVehicleEF	HHD	3.5000e-005	2.7000e-005
tblVehicleEF	HHD	0.09	0.10
tblVehicleEF	HHD	8.8800e-004	7.5200e-004
tblVehicleEF	HHD	0.10	0.10
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	0.01	0.02
tblVehicleEF	HHD	2.5300e-004	2.1900e-004
tblVehicleEF	HHD	6.2000e-005	4.9000e-005
tblVehicleEF	HHD	4.9960e-003	4.3680e-003
tblVehicleEF	HHD	0.46	0.52
tblVehicleEF	HHD	3.5000e-005	2.7000e-005
tblVehicleEF	HHD	0.50	0.48
tblVehicleEF	HHD	8.8800e-004	7.5200e-004
tblVehicleEF	HHD	8.8800e-004	7.5200e-004
tblVehicleEF	HHD	0.11	0.11
tblVehicleEF	HHD	0.11	0.11
tblVehicleEF	LDA	2.8300e-003	2.0270e-003
tblVehicleEF	LDA	3.0060e-003	0.04
tblVehicleEF	LDA	0.41	0.56
tblVehicleEF	LDA	0.80	2.13
tblVehicleEF	LDA	219.95	249.41
tblVehicleEF	LDA	46.71	49.94
tblVehicleEF	LDA	0.60	0.58

tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.04	0.17
tblVehicleEF	LDA	1.8790e-003	1.7070e-003
tblVehicleEF	LDA	2.1490e-003	1.7140e-003
tblVehicleEF	LDA	1.7300e-003	1.5720e-003
tblVehicleEF	LDA	1.9760e-003	1.5760e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	7.1430e-003	7.6970e-003
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	2.2010e-003	2.4670e-003
tblVehicleEF	LDA	4.8000e-004	4.9400e-004
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.04	0.22
tblVehicleEF	LDA	3.0910e-003	3.9780e-003
tblVehicleEF	LDA	2.5210e-003	3.5580e-003
tblVehicleEF	LDA	0.47	0.56
tblVehicleEF	LDA	0.63	0.79
tblVehicleEF	LDA	233.90	264.63
tblVehicleEF	LDA	46.71	52.61
tblVehicleEF	LDA	0.03	0.03

tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	1.8790e-003	2.0930e-003
tblVehicleEF	LDA	2.1490e-003	2.2530e-003
tblVehicleEF	LDA	1.7300e-003	1.9270e-003
tblVehicleEF	LDA	1.9760e-003	2.0710e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	7.7880e-003	0.01
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	2.3410e-003	2.6490e-003
tblVehicleEF	LDA	4.7700e-004	5.3900e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	2.7870e-003	3.5900e-003
tblVehicleEF	LDA	3.3000e-003	4.6640e-003
tblVehicleEF	LDA	0.41	0.49
tblVehicleEF	LDA	0.90	1.14
tblVehicleEF	LDA	219.46	248.27
tblVehicleEF	LDA	46.71	52.61
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.04	0.06

tblVehicleEF	LDA	1.8790e-003	2.0930e-003
tblVehicleEF	LDA	2.1490e-003	2.2530e-003
tblVehicleEF	LDA	1.7300e-003	1.9270e-003
tblVehicleEF	LDA	1.9760e-003	2.0710e-003
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	7.0370e-003	9.0760e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	2.1960e-003	2.4850e-003
tblVehicleEF	LDA	4.8200e-004	5.4500e-004
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDT1	4.4890e-003	3.3460e-003
tblVehicleEF	LDT1	5.7740e-003	0.05
tblVehicleEF	LDT1	0.59	0.77
tblVehicleEF	LDT1	1.36	2.29
tblVehicleEF	LDT1	278.99	301.05
tblVehicleEF	LDT1	60.02	60.36
tblVehicleEF	LDT1	0.04	0.05

tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.07	0.21
tblVehicleEF	LDT1	2.1360e-003	1.9580e-003
tblVehicleEF	LDT1	2.4390e-003	1.9990e-003
tblVehicleEF	LDT1	1.9650e-003	1.8020e-003
tblVehicleEF	LDT1	2.2430e-003	1.8380e-003
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.01	0.01
tblVehicleEF	LDT1	0.11	0.07
tblVehicleEF	LDT1	0.08	0.25
tblVehicleEF	LDT1	2.7950e-003	2.9790e-003
tblVehicleEF	LDT1	6.2300e-004	5.9700e-004
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.11	0.07
tblVehicleEF	LDT1	0.09	0.28
tblVehicleEF	LDT1	4.8820e-003	6.5020e-003
tblVehicleEF	LDT1	4.8220e-003	6.8970e-003
tblVehicleEF	LDT1	0.67	0.84
tblVehicleEF	LDT1	1.07	1.42
tblVehicleEF	LDT1	296.24	329.94
tblVehicleEF	LDT1	60.02	66.21
tblVehicleEF	LDT1	0.04	0.06

tblVehicleEF	LDT1	0.06	0.09
tblVehicleEF	LDT1	2.1360e-003	2.3520e-003
tblVehicleEF	LDT1	2.4390e-003	2.5880e-003
tblVehicleEF	LDT1	1.9650e-003	2.1640e-003
tblVehicleEF	LDT1	2.2430e-003	2.3800e-003
tblVehicleEF	LDT1	0.09	0.11
tblVehicleEF	LDT1	0.14	0.17
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.01	0.02
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.07	0.09
tblVehicleEF	LDT1	2.9680e-003	3.3070e-003
tblVehicleEF	LDT1	6.1800e-004	6.8600e-004
tblVehicleEF	LDT1	0.09	0.11
tblVehicleEF	LDT1	0.14	0.17
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.07	0.10
tblVehicleEF	LDT1	4.4250e-003	5.9110e-003
tblVehicleEF	LDT1	6.3510e-003	9.1220e-003
tblVehicleEF	LDT1	0.59	0.74
tblVehicleEF	LDT1	1.54	2.05
tblVehicleEF	LDT1	278.39	310.08
tblVehicleEF	LDT1	60.02	66.21
tblVehicleEF	LDT1	0.05	0.07
tblVehicleEF	LDT1	0.08	0.11

tblVehicleEF	LDT1	2.1360e-003	2.3520e-003
tblVehicleEF	LDT1	2.4390e-003	2.5880e-003
tblVehicleEF	LDT1	1.9650e-003	2.1640e-003
tblVehicleEF	LDT1	2.2430e-003	2.3800e-003
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.14	0.17
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.01	0.01
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.09	0.12
tblVehicleEF	LDT1	2.7880e-003	3.1070e-003
tblVehicleEF	LDT1	6.2600e-004	6.9700e-004
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.14	0.17
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.09	0.13
tblVehicleEF	LDT1	0.09	0.13
tblVehicleEF	LDT2	4.0670e-003	3.0070e-003
tblVehicleEF	LDT2	3.8900e-003	0.06
tblVehicleEF	LDT2	0.56	0.71
tblVehicleEF	LDT2	1.01	2.68
tblVehicleEF	LDT2	315.12	318.38
tblVehicleEF	LDT2	66.58	64.11
tblVehicleEF	LDT2	0.19	0.17

tblVehicleEF	LDT2	0.04	0.05
tblVehicleEF	LDT2	0.06	0.23
tblVehicleEF	LDT2	2.0530e-003	1.7430e-003
tblVehicleEF	LDT2	2.3100e-003	1.6970e-003
tblVehicleEF	LDT2	1.8880e-003	1.6040e-003
tblVehicleEF	LDT2	2.1240e-003	1.5600e-003
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.07	0.10
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.05	0.27
tblVehicleEF	LDT2	3.1540e-003	3.1490e-003
tblVehicleEF	LDT2	6.8200e-004	6.3400e-004
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.07	0.10
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.06	0.29
tblVehicleEF	LDT2	4.4360e-003	5.4610e-003
tblVehicleEF	LDT2	3.2750e-003	4.3540e-003
tblVehicleEF	LDT2	0.63	0.72
tblVehicleEF	LDT2	0.81	0.97
tblVehicleEF	LDT2	334.70	371.94
tblVehicleEF	LDT2	66.58	73.70
tblVehicleEF	LDT2	0.04	0.05

tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	2.0530e-003	2.1760e-003
tblVehicleEF	LDT2	2.3100e-003	2.3270e-003
tblVehicleEF	LDT2	1.8880e-003	2.0010e-003
tblVehicleEF	LDT2	2.1240e-003	2.1400e-003
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	3.3510e-003	3.7240e-003
tblVehicleEF	LDT2	6.7900e-004	7.5300e-004
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	4.0060e-003	4.9320e-003
tblVehicleEF	LDT2	4.2630e-003	5.7010e-003
tblVehicleEF	LDT2	0.56	0.64
tblVehicleEF	LDT2	1.14	1.38
tblVehicleEF	LDT2	314.44	349.38
tblVehicleEF	LDT2	66.58	73.70
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.07	0.09

tblVehicleEF	LDT2	2.0530e-003	2.1760e-003
tblVehicleEF	LDT2	2.3100e-003	2.3270e-003
tblVehicleEF	LDT2	1.8880e-003	2.0010e-003
tblVehicleEF	LDT2	2.1240e-003	2.1400e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	9.9620e-003	0.01
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	3.1480e-003	3.4980e-003
tblVehicleEF	LDT2	6.8400e-004	7.6000e-004
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LHD1	4.9030e-003	5.7060e-003
tblVehicleEF	LHD1	9.7570e-003	6.6600e-003
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.15	0.20
tblVehicleEF	LHD1	0.63	0.58
tblVehicleEF	LHD1	1.95	1.10
tblVehicleEF	LHD1	8.79	8.63

tblVehicleEF	LHD1	666.50	806.60
tblVehicleEF	LHD1	32.01	12.89
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.45	0.34
tblVehicleEF	LHD1	0.87	0.33
tblVehicleEF	LHD1	7.1700e-004	6.8000e-004
tblVehicleEF	LHD1	0.01	9.5380e-003
tblVehicleEF	LHD1	9.2180e-003	6.6230e-003
tblVehicleEF	LHD1	7.0000e-004	2.4000e-004
tblVehicleEF	LHD1	6.8600e-004	6.5100e-004
tblVehicleEF	LHD1	2.5410e-003	2.3840e-003
tblVehicleEF	LHD1	8.7840e-003	6.2890e-003
tblVehicleEF	LHD1	6.4400e-004	2.2100e-004
tblVehicleEF	LHD1	1.6780e-003	1.4240e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.1380e-003	9.2100e-004
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.27	0.16
tblVehicleEF	LHD1	0.19	0.07
tblVehicleEF	LHD1	8.8000e-005	8.4000e-005
tblVehicleEF	LHD1	6.5320e-003	7.8940e-003
tblVehicleEF	LHD1	3.5600e-004	1.2800e-004
tblVehicleEF	LHD1	1.6780e-003	1.4240e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.02	0.03

tblVehicleEF	LHD1	1.1380e-003	9.2100e-004
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.27	0.16
tblVehicleEF	LHD1	0.20	0.07
tblVehicleEF	LHD1	4.9030e-003	5.6310e-003
tblVehicleEF	LHD1	9.9900e-003	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.15	0.15
tblVehicleEF	LHD1	0.64	0.77
tblVehicleEF	LHD1	1.81	2.15
tblVehicleEF	LHD1	8.79	8.76
tblVehicleEF	LHD1	666.50	690.52
tblVehicleEF	LHD1	32.01	35.12
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD1	0.43	0.57
tblVehicleEF	LHD1	0.80	0.95
tblVehicleEF	LHD1	7.1700e-004	7.0900e-004
tblVehicleEF	LHD1	0.01	9.9640e-003
tblVehicleEF	LHD1	9.2180e-003	9.9640e-003
tblVehicleEF	LHD1	7.0000e-004	8.1300e-004
tblVehicleEF	LHD1	6.8600e-004	6.7800e-004
tblVehicleEF	LHD1	2.5410e-003	2.4910e-003
tblVehicleEF	LHD1	8.7840e-003	9.4940e-003
tblVehicleEF	LHD1	6.4400e-004	7.4800e-004
tblVehicleEF	LHD1	3.2740e-003	3.7230e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.02	0.02

tblVehicleEF	LHD1	2.2070e-003	2.4410e-003
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	0.25	0.27
tblVehicleEF	LHD1	0.17	0.22
tblVehicleEF	LHD1	6.5330e-003	6.7850e-003
tblVehicleEF	LHD1	3.5400e-004	3.9200e-004
tblVehicleEF	LHD1	3.2740e-003	3.7230e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.2070e-003	2.4410e-003
tblVehicleEF	LHD1	0.11	0.12
tblVehicleEF	LHD1	0.25	0.27
tblVehicleEF	LHD1	0.19	0.24
tblVehicleEF	LHD1	4.9030e-003	5.6310e-003
tblVehicleEF	LHD1	9.6270e-003	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.15	0.15
tblVehicleEF	LHD1	0.63	0.74
tblVehicleEF	LHD1	2.06	2.46
tblVehicleEF	LHD1	8.79	8.76
tblVehicleEF	LHD1	666.50	690.52
tblVehicleEF	LHD1	32.01	35.12
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD1	0.46	0.62
tblVehicleEF	LHD1	0.91	1.08
tblVehicleEF	LHD1	7.1700e-004	7.0900e-004
tblVehicleEF	LHD1	0.01	9.9640e-003

tblVehicleEF	LHD1	9.2180e-003	9.9640e-003
tblVehicleEF	LHD1	7.0000e-004	8.1300e-004
tblVehicleEF	LHD1	6.8600e-004	6.7800e-004
tblVehicleEF	LHD1	2.5410e-003	2.4910e-003
tblVehicleEF	LHD1	8.7840e-003	9.4940e-003
tblVehicleEF	LHD1	6.4400e-004	7.4800e-004
tblVehicleEF	LHD1	1.0810e-003	1.1850e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	5.8600e-004	6.2900e-004
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	0.29	0.31
tblVehicleEF	LHD1	0.19	0.24
tblVehicleEF	LHD1	6.5320e-003	6.7840e-003
tblVehicleEF	LHD1	3.5800e-004	3.9700e-004
tblVehicleEF	LHD1	1.0810e-003	1.1850e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	5.8600e-004	6.2900e-004
tblVehicleEF	LHD1	0.11	0.11
tblVehicleEF	LHD1	0.29	0.31
tblVehicleEF	LHD1	0.29	0.31
tblVehicleEF	LHD1	0.21	0.27
tblVehicleEF	LHD1	0.21	0.27
tblVehicleEF	LHD2	2.8130e-003	3.3650e-003
tblVehicleEF	LHD2	5.7530e-003	6.0180e-003
tblVehicleEF	LHD2	4.0620e-003	7.6680e-003

tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.47	0.52
tblVehicleEF	LHD2	0.97	0.65
tblVehicleEF	LHD2	13.71	13.47
tblVehicleEF	LHD2	684.83	765.11
tblVehicleEF	LHD2	22.72	8.40
tblVehicleEF	LHD2	5.1840e-003	5.5390e-003
tblVehicleEF	LHD2	0.08	0.08
tblVehicleEF	LHD2	0.28	0.47
tblVehicleEF	LHD2	0.32	0.19
tblVehicleEF	LHD2	1.1150e-003	1.3540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7400e-004	1.2600e-004
tblVehicleEF	LHD2	1.0660e-003	1.2960e-003
tblVehicleEF	LHD2	2.7020e-003	2.6650e-003
tblVehicleEF	LHD2	9.6070e-003	0.01
tblVehicleEF	LHD2	3.4400e-004	1.1600e-004
tblVehicleEF	LHD2	4.7800e-004	8.0100e-004
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.3100e-004	5.0800e-004
tblVehicleEF	LHD2	0.09	0.10
tblVehicleEF	LHD2	0.05	0.09
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	1.3400e-004	1.2900e-004
tblVehicleEF	LHD2	6.6560e-003	7.3990e-003

tblVehicleEF	LHD2	2.4400e-004	8.3000e-005
tblVehicleEF	LHD2	4.7800e-004	8.0100e-004
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	3.3100e-004	5.0800e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.05	0.09
tblVehicleEF	LHD2	0.06	0.04
tblVehicleEF	LHD2	2.8130e-003	3.2090e-003
tblVehicleEF	LHD2	5.8110e-003	6.8030e-003
tblVehicleEF	LHD2	3.8740e-003	5.3080e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.47	0.51
tblVehicleEF	LHD2	0.90	1.03
tblVehicleEF	LHD2	13.71	13.84
tblVehicleEF	LHD2	684.83	698.44
tblVehicleEF	LHD2	22.72	23.92
tblVehicleEF	LHD2	0.08	0.09
tblVehicleEF	LHD2	0.27	0.42
tblVehicleEF	LHD2	0.30	0.38
tblVehicleEF	LHD2	1.1150e-003	1.1970e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7400e-004	3.9100e-004
tblVehicleEF	LHD2	1.0660e-003	1.1450e-003
tblVehicleEF	LHD2	2.7020e-003	2.6920e-003
tblVehicleEF	LHD2	9.6070e-003	0.01

tblVehicleEF	LHD2	3.4400e-004	3.5900e-004
tblVehicleEF	LHD2	9.4400e-004	1.1730e-003
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	6.5500e-004	7.7100e-004
tblVehicleEF	LHD2	0.09	0.10
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.05	0.07
tblVehicleEF	LHD2	1.3400e-004	1.3500e-004
tblVehicleEF	LHD2	6.6560e-003	6.7910e-003
tblVehicleEF	LHD2	2.4300e-004	2.5700e-004
tblVehicleEF	LHD2	9.4400e-004	1.1730e-003
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.5500e-004	7.7100e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.06	0.08
tblVehicleEF	LHD2	2.8130e-003	3.2090e-003
tblVehicleEF	LHD2	5.7210e-003	6.6590e-003
tblVehicleEF	LHD2	4.1800e-003	5.8010e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.46	0.50
tblVehicleEF	LHD2	1.02	1.17
tblVehicleEF	LHD2	13.71	13.84
tblVehicleEF	LHD2	684.83	698.44
tblVehicleEF	LHD2	22.72	23.92

tblVehicleEF	LHD2	0.08	0.09
tblVehicleEF	LHD2	0.29	0.45
tblVehicleEF	LHD2	0.33	0.42
tblVehicleEF	LHD2	1.1150e-003	1.1970e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7400e-004	3.9100e-004
tblVehicleEF	LHD2	1.0660e-003	1.1450e-003
tblVehicleEF	LHD2	2.7020e-003	2.6920e-003
tblVehicleEF	LHD2	9.6070e-003	0.01
tblVehicleEF	LHD2	3.4400e-004	3.5900e-004
tblVehicleEF	LHD2	3.0900e-004	3.6600e-004
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	1.6900e-004	1.9400e-004
tblVehicleEF	LHD2	0.09	0.10
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.06	0.08
tblVehicleEF	LHD2	1.3400e-004	1.3500e-004
tblVehicleEF	LHD2	6.6560e-003	6.7910e-003
tblVehicleEF	LHD2	2.4500e-004	2.6000e-004
tblVehicleEF	LHD2	3.0900e-004	3.6600e-004
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.6900e-004	1.9400e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.06	0.07

tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.06	0.09
tblVehicleEF	LHD2	0.06	0.09
tblVehicleEF	MCY	0.57	0.40
tblVehicleEF	MCY	0.16	0.25
tblVehicleEF	MCY	19.84	20.63
tblVehicleEF	MCY	10.27	9.07
tblVehicleEF	MCY	194.23	229.85
tblVehicleEF	MCY	44.84	61.66
tblVehicleEF	MCY	5.9520e-003	7.1020e-003
tblVehicleEF	MCY	1.18	1.19
tblVehicleEF	MCY	0.32	0.28
tblVehicleEF	MCY	2.6190e-003	2.3850e-003
tblVehicleEF	MCY	3.5290e-003	2.9930e-003
tblVehicleEF	MCY	2.4450e-003	2.2300e-003
tblVehicleEF	MCY	3.3180e-003	2.8200e-003
tblVehicleEF	MCY	0.77	0.79
tblVehicleEF	MCY	0.73	0.78
tblVehicleEF	MCY	0.49	0.51
tblVehicleEF	MCY	2.75	2.80
tblVehicleEF	MCY	0.71	0.70
tblVehicleEF	MCY	2.21	1.99
tblVehicleEF	MCY	2.3500e-003	2.2750e-003
tblVehicleEF	MCY	6.8100e-004	6.1000e-004
tblVehicleEF	MCY	0.77	0.79
tblVehicleEF	MCY	0.73	0.78
tblVehicleEF	MCY	0.49	0.51

tblVehicleEF	MCY	3.42	3.47
tblVehicleEF	MCY	0.71	0.70
tblVehicleEF	MCY	2.40	2.16
tblVehicleEF	MCY	0.55	0.54
tblVehicleEF	MCY	0.13	0.14
tblVehicleEF	MCY	18.54	19.20
tblVehicleEF	MCY	8.87	8.83
tblVehicleEF	MCY	194.23	193.06
tblVehicleEF	MCY	44.84	46.00
tblVehicleEF	MCY	1.03	1.03
tblVehicleEF	MCY	0.29	0.30
tblVehicleEF	MCY	2.6190e-003	2.5080e-003
tblVehicleEF	MCY	3.5290e-003	3.7870e-003
tblVehicleEF	MCY	2.4450e-003	2.3460e-003
tblVehicleEF	MCY	3.3180e-003	3.5710e-003
tblVehicleEF	MCY	1.92	1.97
tblVehicleEF	MCY	0.87	0.93
tblVehicleEF	MCY	1.24	1.31
tblVehicleEF	MCY	2.64	2.68
tblVehicleEF	MCY	0.65	0.77
tblVehicleEF	MCY	1.84	1.87
tblVehicleEF	MCY	6.4700e-004	6.5900e-004
tblVehicleEF	MCY	1.92	1.97
tblVehicleEF	MCY	0.87	0.93
tblVehicleEF	MCY	1.24	1.31
tblVehicleEF	MCY	3.29	3.32
tblVehicleEF	MCY	0.65	0.77

tblVehicleEF	MCY	2.00	2.03
tblVehicleEF	MCY	0.58	0.58
tblVehicleEF	MCY	0.18	0.19
tblVehicleEF	MCY	21.03	21.90
tblVehicleEF	MCY	11.37	11.25
tblVehicleEF	MCY	194.23	193.06
tblVehicleEF	MCY	44.84	46.00
tblVehicleEF	MCY	1.25	1.26
tblVehicleEF	MCY	0.34	0.34
tblVehicleEF	MCY	2.6190e-003	2.5080e-003
tblVehicleEF	MCY	3.5290e-003	3.7870e-003
tblVehicleEF	MCY	2.4450e-003	2.3460e-003
tblVehicleEF	MCY	3.3180e-003	3.5710e-003
tblVehicleEF	MCY	0.34	0.35
tblVehicleEF	MCY	0.91	1.00
tblVehicleEF	MCY	0.21	0.21
tblVehicleEF	MCY	2.83	2.89
tblVehicleEF	MCY	0.84	0.99
tblVehicleEF	MCY	2.47	2.53
tblVehicleEF	MCY	2.3720e-003	2.3760e-003
tblVehicleEF	MCY	7.0700e-004	7.1900e-004
tblVehicleEF	MCY	0.34	0.35
tblVehicleEF	MCY	0.91	1.00
tblVehicleEF	MCY	0.21	0.21
tblVehicleEF	MCY	3.52	3.57
tblVehicleEF	MCY	0.84	0.99
tblVehicleEF	MCY	0.84	0.99

tblVehicleEF	MCY	2.69	2.76
tblVehicleEF	MCY	2.69	2.76
tblVehicleEF	MDV	5.6430e-003	3.0460e-003
tblVehicleEF	MDV	6.6600e-003	0.06
tblVehicleEF	MDV	0.68	0.69
tblVehicleEF	MDV	1.44	2.72
tblVehicleEF	MDV	417.67	375.26
tblVehicleEF	MDV	86.35	73.63
tblVehicleEF	MDV	0.09	0.11
tblVehicleEF	MDV	0.06	0.05
tblVehicleEF	MDV	0.10	0.23
tblVehicleEF	MDV	2.0890e-003	1.8270e-003
tblVehicleEF	MDV	2.2820e-003	1.7490e-003
tblVehicleEF	MDV	1.9240e-003	1.6850e-003
tblVehicleEF	MDV	2.0980e-003	1.6080e-003
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.10	0.09
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.01	0.01
tblVehicleEF	MDV	0.09	0.05
tblVehicleEF	MDV	0.09	0.27
tblVehicleEF	MDV	4.1750e-003	3.7080e-003
tblVehicleEF	MDV	8.8800e-004	7.2900e-004
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.10	0.09
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.02	0.02

tblVehicleEF	MDV	0.09	0.05
tblVehicleEF	MDV	0.10	0.30
tblVehicleEF	MDV	6.1460e-003	7.7670e-003
tblVehicleEF	MDV	5.5860e-003	7.5720e-003
tblVehicleEF	MDV	0.77	0.90
tblVehicleEF	MDV	1.14	1.41
tblVehicleEF	MDV	442.84	488.04
tblVehicleEF	MDV	86.35	94.54
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	2.0890e-003	2.2400e-003
tblVehicleEF	MDV	2.2820e-003	2.3440e-003
tblVehicleEF	MDV	1.9240e-003	2.0640e-003
tblVehicleEF	MDV	2.0980e-003	2.1550e-003
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.11	0.12
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	4.4280e-003	4.8810e-003
tblVehicleEF	MDV	8.8200e-004	9.6900e-004
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.11	0.12
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.08	0.08

tblVehicleEF	MDV	0.08	0.11
tblVehicleEF	MDV	5.5630e-003	7.0370e-003
tblVehicleEF	MDV	7.3120e-003	9.9480e-003
tblVehicleEF	MDV	0.68	0.80
tblVehicleEF	MDV	1.63	2.03
tblVehicleEF	MDV	416.79	459.24
tblVehicleEF	MDV	86.35	94.54
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.11	0.15
tblVehicleEF	MDV	2.0890e-003	2.2400e-003
tblVehicleEF	MDV	2.2820e-003	2.3440e-003
tblVehicleEF	MDV	1.9240e-003	2.0640e-003
tblVehicleEF	MDV	2.0980e-003	2.1550e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.11	0.12
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.01	0.02
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.10	0.13
tblVehicleEF	MDV	4.1670e-003	4.5920e-003
tblVehicleEF	MDV	8.9100e-004	9.8000e-004
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.11	0.12
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.11	0.11

tblVehicleEF	MDV	0.11	0.15
tblVehicleEF	MDV	0.11	0.15
tblVehicleEF	MH	0.01	7.9410e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.64	0.78
tblVehicleEF	MH	3.80	1.96
tblVehicleEF	MH	1,178.74	1,444.02
tblVehicleEF	MH	56.30	17.21
tblVehicleEF	MH	5.6100e-004	5.8400e-004
tblVehicleEF	MH	0.73	0.98
tblVehicleEF	MH	0.57	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	7.9720e-003	0.01
tblVehicleEF	MH	9.4600e-004	2.8400e-004
tblVehicleEF	MH	3.2220e-003	3.2780e-003
tblVehicleEF	MH	7.5840e-003	0.01
tblVehicleEF	MH	8.7000e-004	2.6100e-004
tblVehicleEF	MH	0.27	0.38
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.12	0.15
tblVehicleEF	MH	0.04	0.05
tblVehicleEF	MH	9.0630e-003	9.9170e-003
tblVehicleEF	MH	0.21	0.08
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.2900e-004	1.7000e-004
tblVehicleEF	MH	0.27	0.38
tblVehicleEF	MH	0.03	0.04

tblVehicleEF	MH	0.12	0.15
tblVehicleEF	MH	0.05	0.07
tblVehicleEF	MH	9.0630e-003	9.9170e-003
tblVehicleEF	MH	0.23	0.09
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.66	1.06
tblVehicleEF	MH	3.49	4.00
tblVehicleEF	MH	1,178.74	1,185.81
tblVehicleEF	MH	56.30	56.72
tblVehicleEF	MH	0.69	0.78
tblVehicleEF	MH	0.52	0.57
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	7.9720e-003	0.01
tblVehicleEF	MH	9.4600e-004	1.0110e-003
tblVehicleEF	MH	3.2220e-003	3.2230e-003
tblVehicleEF	MH	7.5840e-003	0.01
tblVehicleEF	MH	8.7000e-004	9.3000e-004
tblVehicleEF	MH	0.55	0.70
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	0.26	0.30
tblVehicleEF	MH	0.04	0.06
tblVehicleEF	MH	8.7470e-003	0.01
tblVehicleEF	MH	0.20	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.2300e-004	6.3600e-004
tblVehicleEF	MH	0.55	0.70

tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	0.26	0.30
tblVehicleEF	MH	0.05	0.08
tblVehicleEF	MH	8.7470e-003	0.01
tblVehicleEF	MH	0.22	0.25
tblVehicleEF	MH	9.9460e-003	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.62	0.99
tblVehicleEF	MH	4.02	4.62
tblVehicleEF	MH	1,178.74	1,185.81
tblVehicleEF	MH	56.30	56.72
tblVehicleEF	MH	0.75	0.85
tblVehicleEF	MH	0.59	0.65
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	7.9720e-003	0.01
tblVehicleEF	MH	9.4600e-004	1.0110e-003
tblVehicleEF	MH	3.2220e-003	3.2230e-003
tblVehicleEF	MH	7.5840e-003	0.01
tblVehicleEF	MH	8.7000e-004	9.3000e-004
tblVehicleEF	MH	0.17	0.20
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.05	0.06
tblVehicleEF	MH	0.04	0.05
tblVehicleEF	MH	9.7280e-003	0.01
tblVehicleEF	MH	0.22	0.25
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.3200e-004	6.4700e-004

tblVehicleEF	MH	0.17	0.20
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.05	0.06
tblVehicleEF	MH	0.05	0.07
tblVehicleEF	MH	9.7280e-003	0.01
tblVehicleEF	MH	9.7280e-003	0.01
tblVehicleEF	MH	0.24	0.28
tblVehicleEF	MH	0.24	0.28
tblVehicleEF	MHD	0.02	3.1870e-003
tblVehicleEF	MHD	2.7450e-003	1.3420e-003
tblVehicleEF	MHD	0.04	7.5740e-003
tblVehicleEF	MHD	0.28	0.50
tblVehicleEF	MHD	0.26	0.19
tblVehicleEF	MHD	3.52	0.85
tblVehicleEF	MHD	165.04	115.14
tblVehicleEF	MHD	1,167.62	1,042.42
tblVehicleEF	MHD	45.62	7.73
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	0.47	0.72
tblVehicleEF	MHD	1.06	1.42
tblVehicleEF	MHD	12.85	1.80
tblVehicleEF	MHD	1.0700e-004	6.2700e-004
tblVehicleEF	MHD	3.0730e-003	6.7340e-003
tblVehicleEF	MHD	5.8900e-004	8.6000e-005
tblVehicleEF	MHD	1.0200e-004	6.0000e-004
tblVehicleEF	MHD	2.9370e-003	6.4390e-003
tblVehicleEF	MHD	5.4200e-004	7.9000e-005

tblVehicleEF	MHD	5.9900e-004	3.0600e-004
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.1100e-004	1.9900e-004
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.01	0.02
tblVehicleEF	MHD	0.22	0.04
tblVehicleEF	MHD	1.5840e-003	1.0890e-003
tblVehicleEF	MHD	0.01	9.9130e-003
tblVehicleEF	MHD	5.1800e-004	7.7000e-005
tblVehicleEF	MHD	5.9900e-004	3.0600e-004
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	4.1100e-004	1.9900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.01	0.02
tblVehicleEF	MHD	0.24	0.04
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	2.7790e-003	3.5180e-003
tblVehicleEF	MHD	0.04	0.04
tblVehicleEF	MHD	0.20	0.22
tblVehicleEF	MHD	0.26	0.30
tblVehicleEF	MHD	3.22	4.26
tblVehicleEF	MHD	174.95	164.67
tblVehicleEF	MHD	1,167.62	1,179.47
tblVehicleEF	MHD	45.62	51.33
tblVehicleEF	MHD	0.48	0.47

tblVehicleEF	MHD	1.02	1.04
tblVehicleEF	MHD	12.81	12.00
tblVehicleEF	MHD	9.0000e-005	1.3400e-004
tblVehicleEF	MHD	3.0730e-003	3.1450e-003
tblVehicleEF	MHD	5.8900e-004	7.2000e-004
tblVehicleEF	MHD	8.6000e-005	1.2800e-004
tblVehicleEF	MHD	2.9370e-003	3.0060e-003
tblVehicleEF	MHD	5.4200e-004	6.6200e-004
tblVehicleEF	MHD	1.1970e-003	1.5510e-003
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	8.2800e-004	1.0170e-003
tblVehicleEF	MHD	0.04	0.04
tblVehicleEF	MHD	0.01	0.02
tblVehicleEF	MHD	0.21	0.27
tblVehicleEF	MHD	1.6770e-003	1.5800e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.1300e-004	5.8800e-004
tblVehicleEF	MHD	1.1970e-003	1.5510e-003
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	8.2800e-004	1.0170e-003
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.01	0.02
tblVehicleEF	MHD	0.23	0.30
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.7270e-003	3.4210e-003

tblVehicleEF	MHD	0.04	0.05
tblVehicleEF	MHD	0.38	0.41
tblVehicleEF	MHD	0.26	0.30
tblVehicleEF	MHD	3.73	4.94
tblVehicleEF	MHD	151.64	142.73
tblVehicleEF	MHD	1,167.62	1,179.47
tblVehicleEF	MHD	45.62	51.33
tblVehicleEF	MHD	0.45	0.43
tblVehicleEF	MHD	1.08	1.11
tblVehicleEF	MHD	12.87	12.08
tblVehicleEF	MHD	1.3000e-004	1.9300e-004
tblVehicleEF	MHD	3.0730e-003	3.1450e-003
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tblVehicleEF	MHD	2.9370e-003	3.0060e-003
tblVehicleEF	MHD	5.4200e-004	6.6200e-004
tblVehicleEF	MHD	3.8100e-004	4.5200e-004
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.0600e-004	2.3200e-004
tblVehicleEF	MHD	0.04	0.04
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.23	0.30
tblVehicleEF	MHD	1.4570e-003	1.3730e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.2100e-004	6.0000e-004
tblVehicleEF	MHD	3.8100e-004	4.5200e-004

tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	2.0600e-004	2.3200e-004
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.25	0.33
tblVehicleEF	MHD	0.25	0.33
tblVehicleEF	OBUS	0.01	6.6390e-003
tblVehicleEF	OBUS	4.3940e-003	3.7010e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.24	0.61
tblVehicleEF	OBUS	0.37	0.48
tblVehicleEF	OBUS	4.27	1.70
tblVehicleEF	OBUS	161.78	100.56
tblVehicleEF	OBUS	1,301.27	1,333.01
tblVehicleEF	OBUS	62.08	14.28
tblVehicleEF	OBUS	4.2720e-003	3.4080e-003
tblVehicleEF	OBUS	0.37	0.41
tblVehicleEF	OBUS	1.15	1.59
tblVehicleEF	OBUS	3.97	1.17
tblVehicleEF	OBUS	3.4000e-005	1.3400e-004
tblVehicleEF	OBUS	3.3220e-003	8.1250e-003
tblVehicleEF	OBUS	7.2500e-004	1.4000e-004
tblVehicleEF	OBUS	3.3000e-005	1.2900e-004
tblVehicleEF	OBUS	3.1660e-003	7.7640e-003
tblVehicleEF	OBUS	6.6600e-004	1.2900e-004

tblVehicleEF	OBUS	1.1130e-003	1.0910e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	6.1700e-004	5.6600e-004
tblVehicleEF	OBUS	0.05	0.03
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.28	0.08
tblVehicleEF	OBUS	1.5540e-003	9.5500e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	6.9600e-004	1.4100e-004
tblVehicleEF	OBUS	1.1130e-003	1.0910e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	6.1700e-004	5.6600e-004
tblVehicleEF	OBUS	0.06	0.03
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.30	0.09
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.4830e-003	5.4750e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.23	0.23
tblVehicleEF	OBUS	0.37	0.43
tblVehicleEF	OBUS	3.92	4.35
tblVehicleEF	OBUS	170.49	149.62
tblVehicleEF	OBUS	1,301.27	1,309.44
tblVehicleEF	OBUS	62.08	64.09
tblVehicleEF	OBUS	0.39	0.33

tblVehicleEF	OBUS	1.10	1.05
tblVehicleEF	OBUS	3.91	3.61
tblVehicleEF	OBUS	2.9000e-005	2.5000e-005
tblVehicleEF	OBUS	3.3220e-003	3.1040e-003
tblVehicleEF	OBUS	7.2500e-004	6.6000e-004
tblVehicleEF	OBUS	2.8000e-005	2.4000e-005
tblVehicleEF	OBUS	3.1660e-003	2.9580e-003
tblVehicleEF	OBUS	6.6600e-004	6.0600e-004
tblVehicleEF	OBUS	2.1200e-003	2.1040e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	1.2420e-003	1.2250e-003
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.26	0.28
tblVehicleEF	OBUS	1.6370e-003	1.4390e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	6.9000e-004	7.1700e-004
tblVehicleEF	OBUS	2.1200e-003	2.1040e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.04
tblVehicleEF	OBUS	1.2420e-003	1.2250e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.28	0.31
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.3470e-003	5.2770e-003

tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.26	0.25
tblVehicleEF	OBUS	0.37	0.42
tblVehicleEF	OBUS	4.51	5.01
tblVehicleEF	OBUS	149.76	131.74
tblVehicleEF	OBUS	1,301.27	1,309.44
tblVehicleEF	OBUS	62.08	64.09
tblVehicleEF	OBUS	0.36	0.31
tblVehicleEF	OBUS	1.17	1.12
tblVehicleEF	OBUS	4.00	3.71
tblVehicleEF	OBUS	4.2000e-005	3.6000e-005
tblVehicleEF	OBUS	3.3220e-003	3.1040e-003
tblVehicleEF	OBUS	7.2500e-004	6.6000e-004
tblVehicleEF	OBUS	4.0000e-005	3.4000e-005
tblVehicleEF	OBUS	3.1660e-003	2.9580e-003
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tblVehicleEF	OBUS	8.0300e-004	7.8400e-004
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	2.8100e-004	2.7200e-004
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.29	0.32
tblVehicleEF	OBUS	1.4400e-003	1.2680e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.0000e-004	7.2900e-004
tblVehicleEF	OBUS	8.0300e-004	7.8400e-004

tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	2.8100e-004	2.7200e-004
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.31	0.35
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tblVehicleEF	SBUS	0.80	0.16
tblVehicleEF	SBUS	7.5620e-003	3.3570e-003
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tblVehicleEF	SBUS	58.74	11.79
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tblVehicleEF	SBUS	6.13	2.10
tblVehicleEF	SBUS	2.50	1.47
tblVehicleEF	SBUS	11.44	1.21
tblVehicleEF	SBUS	4.2990e-003	1.4420e-003
tblVehicleEF	SBUS	0.01	9.6480e-003
tblVehicleEF	SBUS	0.01	9.6500e-003
tblVehicleEF	SBUS	7.7000e-004	1.4900e-004
tblVehicleEF	SBUS	4.1130e-003	1.3800e-003
tblVehicleEF	SBUS	2.6290e-003	2.4120e-003

tblVehicleEF	SBUS	0.01	9.2040e-003
tblVehicleEF	SBUS	7.0800e-004	1.3700e-004
tblVehicleEF	SBUS	3.1740e-003	1.1660e-003
tblVehicleEF	SBUS	0.04	0.01
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tblVehicleEF	SBUS	0.08	0.03
tblVehicleEF	SBUS	0.02	0.02
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tblVehicleEF	SBUS	7.0500e-004	1.1700e-004
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tblVehicleEF	SBUS	1.8100e-003	6.2300e-004
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tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.40	0.08
tblVehicleEF	SBUS	0.80	0.81
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tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	8.19	8.00
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tblVehicleEF	SBUS	5.15	5.45
tblVehicleEF	SBUS	1,120.33	1,152.72
tblVehicleEF	SBUS	1,044.82	1,057.81

tblVehicleEF	SBUS	58.74	57.01
tblVehicleEF	SBUS	6.32	8.15
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tblVehicleEF	SBUS	11.40	11.79
tblVehicleEF	SBUS	3.6240e-003	5.9420e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	7.7000e-004	6.8100e-004
tblVehicleEF	SBUS	3.4670e-003	5.6850e-003
tblVehicleEF	SBUS	2.6290e-003	2.6370e-003
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	7.0800e-004	6.2600e-004
tblVehicleEF	SBUS	5.9580e-003	5.2560e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.97	0.95
tblVehicleEF	SBUS	3.5880e-003	3.1210e-003
tblVehicleEF	SBUS	0.08	0.09
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.31	0.33
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tblVehicleEF	SBUS	0.01	0.01
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tblVehicleEF	SBUS	5.9580e-003	5.2560e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	1.41	1.38
tblVehicleEF	SBUS	3.5880e-003	3.1210e-003
tblVehicleEF	SBUS	0.09	0.11

tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.34	0.36
tblVehicleEF	SBUS	0.80	0.81
tblVehicleEF	SBUS	7.4710e-003	9.7060e-003
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tblVehicleEF	SBUS	1,044.82	1,057.81
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tblVehicleEF	SBUS	11.46	11.86
tblVehicleEF	SBUS	5.2310e-003	8.5770e-003
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tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	7.7000e-004	6.8100e-004
tblVehicleEF	SBUS	5.0040e-003	8.2060e-003
tblVehicleEF	SBUS	2.6290e-003	2.6370e-003
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	7.0800e-004	6.2600e-004
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tblVehicleEF	SBUS	0.08	0.09

tblVehicleEF	SBUS	0.02	0.02
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tblVehicleEF	SBUS	8.3900e-004	7.1100e-004
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tblVehicleEF	SBUS	0.02	0.02
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tblVehicleEF	SBUS	0.44	0.46
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tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.26	5.4620e-003
tblVehicleEF	UBUS	1.3150e-003	0.00

tblVehicleEF	UBUS	0.28	0.03
tblVehicleEF	UBUS	3.0000e-003	8.6540e-003
tblVehicleEF	UBUS	0.25	5.2260e-003
tblVehicleEF	UBUS	1.2090e-003	0.00
tblVehicleEF	UBUS	3.4350e-003	0.00
tblVehicleEF	UBUS	0.08	0.00
tblVehicleEF	UBUS	1.8030e-003	0.00
tblVehicleEF	UBUS	1.15	0.02
tblVehicleEF	UBUS	0.04	0.00
tblVehicleEF	UBUS	0.68	0.00
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	9.6700e-004	0.00
tblVehicleEF	UBUS	3.4350e-003	0.00
tblVehicleEF	UBUS	0.08	0.00
tblVehicleEF	UBUS	1.8030e-003	0.00
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tblVehicleEF	UBUS	7.57	7.07
tblVehicleEF	UBUS	2,200.22	2,259.15
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tblVehicleEF	UBUS	13.26	15.09
tblVehicleEF	UBUS	16.25	17.12
tblVehicleEF	UBUS	0.65	0.69

tblVehicleEF	UBUS	0.26	0.30
tblVehicleEF	UBUS	1.3150e-003	1.1580e-003
tblVehicleEF	UBUS	0.28	0.29
tblVehicleEF	UBUS	0.25	0.29
tblVehicleEF	UBUS	1.2090e-003	1.0650e-003
tblVehicleEF	UBUS	7.0130e-003	6.5610e-003
tblVehicleEF	UBUS	0.09	0.08
tblVehicleEF	UBUS	3.6960e-003	3.2820e-003
tblVehicleEF	UBUS	1.18	1.30
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	0.57	0.51
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	9.2700e-004	7.8500e-004
tblVehicleEF	UBUS	7.0130e-003	6.5610e-003
tblVehicleEF	UBUS	0.09	0.08
tblVehicleEF	UBUS	3.6960e-003	3.2820e-003
tblVehicleEF	UBUS	1.70	1.84
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	0.62	0.56
tblVehicleEF	UBUS	0.41	0.41
tblVehicleEF	UBUS	0.06	0.05
tblVehicleEF	UBUS	8.04	8.57
tblVehicleEF	UBUS	11.58	10.92
tblVehicleEF	UBUS	2,200.22	2,259.15
tblVehicleEF	UBUS	79.12	65.85
tblVehicleEF	UBUS	14.10	16.05
tblVehicleEF	UBUS	16.37	17.22

tblVehicleEF	UBUS	0.65	0.69
tblVehicleEF	UBUS	0.26	0.30
tblVehicleEF	UBUS	1.3150e-003	1.1580e-003
tblVehicleEF	UBUS	0.28	0.29
tblVehicleEF	UBUS	0.25	0.29
tblVehicleEF	UBUS	1.2090e-003	1.0650e-003
tblVehicleEF	UBUS	2.0120e-003	1.7960e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	6.6800e-004	5.5600e-004
tblVehicleEF	UBUS	1.13	1.25
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	0.76	0.69
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	9.9700e-004	8.5200e-004
tblVehicleEF	UBUS	2.0120e-003	1.7960e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	6.6800e-004	5.5600e-004
tblVehicleEF	UBUS	1.63	1.77
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	0.83	0.76
tblVehicleEF	UBUS	0.83	0.76
tblVehicleTrips	CC_TTP	82.30	48.00
tblVehicleTrips	CC_TTP	0.00	48.00
tblVehicleTrips	CNW_TTP	5.00	19.00
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CW_TTP	12.70	33.00

tblVehicleTrips	CW_TTP	0.00	33.00
tblVehicleTrips	DV_TP	58.00	28.00
tblVehicleTrips	DV_TP	0.00	28.00
tblVehicleTrips	PB_TP	14.00	6.00
tblVehicleTrips	PB_TP	0.00	6.00
tblVehicleTrips	PR_TP	28.00	66.00
tblVehicleTrips	PR_TP	0.00	66.00
tblVehicleTrips	ST_TR	6.39	1.86
tblVehicleTrips	ST_TR	6.21	7.10
tblVehicleTrips	ST_TR	0.00	16.93
tblVehicleTrips	SU_TR	5.86	1.86
tblVehicleTrips	SU_TR	5.83	7.10
tblVehicleTrips	SU_TR	0.00	16.93
tblVehicleTrips	WD_TR	6.65	1.86
tblVehicleTrips	WD_TR	74.06	7.10
tblVehicleTrips	WD_TR	0.00	16.93
tblWoodstoves	NumberCatalytic	9.10	0.00
tblWoodstoves	NumberNoncatalytic	9.10	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021											0.0000	34.2180	34.2180	9.5700e-003	0.0000	34.4574
Maximum											**0.0000**	**34.2180**	**34.2180**	**9.5700e-003**	**0.0000**	**34.4574**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021											0.0000	34.2180	34.2180	9.5700e-003	0.0000	34.4574
Maximum											**0.0000**	**34.2180**	**34.2180**	**9.5700e-003**	**0.0000**	**34.4574**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	5.5322	5.5322	5.3200e-003	0.0000	5.6652
Energy											0.0000	213.7797	213.7797	0.0499	0.0134	219.0224
Mobile											0.0000	602.8628	602.8628	0.0218	0.0000	603.4067
Stationary											0.0000	7.6540	7.6540	1.0700e-003	0.0000	7.6809
Waste											45.1249	0.0000	45.1249	2.6668	0.0000	111.7950
Water											9.5411	0.0000	9.5411	0.9830	0.0238	41.2000
Total											**54.6660**	**829.8287**	**884.4947**	**3.7279**	**0.0372**	**988.7701**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	5.5322	5.5322	5.3200e-003	0.0000	5.6652
Energy											0.0000	213.7797	213.7797	0.0499	0.0134	219.0224
Mobile											0.0000	602.8628	602.8628	0.0218	0.0000	603.4067
Stationary											0.0000	7.6540	7.6540	1.0700e-003	0.0000	7.6809
Waste											45.1249	0.0000	45.1249	2.6668	0.0000	111.7950
Water											9.5411	0.0000	9.5411	0.9830	0.0238	41.2000
Total											**54.6660**	**829.8287**	**884.4947**	**3.7279**	**0.0372**	**988.7701**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	1/28/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 6.75

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	34.0008	34.0008	9.5700e-003	0.0000	34.2400
Total											**0.0000**	**34.0008**	**34.0008**	**9.5700e-003**	**0.0000**	**34.2400**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2173	0.2173	0.0000	0.0000	0.2174
Total											**0.0000**	**0.2173**	**0.2173**	**0.0000**	**0.0000**	**0.2174**

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	34.0007	34.0007	9.5700e-003	0.0000	34.2400
Total											**0.0000**	**34.0007**	**34.0007**	**9.5700e-003**	**0.0000**	**34.2400**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2173	0.2173	0.0000	0.0000	0.2174
Total											**0.0000**	**0.2173**	**0.2173**	**0.0000**	**0.0000**	**0.2174**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	602.8628	602.8628	0.0218	0.0000	603.4067
Unmitigated											0.0000	602.8628	602.8628	0.0218	0.0000	603.4067

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	846.30	846.30	846.30	1,954,621	1,954,621
Day-Care Center	71.00	71.00	71.00	151,575	151,575
Enclosed Parking with Elevator	0.00	0.00	0.00		
User Defined Parking	16.93	16.93	16.93	36,143	36,143
Total	934.23	934.23	934.23	2,142,338	2,142,338

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Day-Care Center	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
User Defined Parking	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Day-Care Center	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Enclosed Parking with Elevator	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
User Defined Parking	0.179362	0.016959	0.053679	0.420000	0.000000	0.090000	0.190000	0.050000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	0.0000	0.0000	0.0458	9.4800e-003	3.9723
Electricity Unmitigated											0.0000	0.0000	0.0000	0.0458	9.4800e-003	3.9723
NaturalGas Mitigated											0.0000	213.7797	213.7797	4.1000e-003	3.9200e-003	215.0501
NaturalGas Unmitigated											0.0000	213.7797	213.7797	4.1000e-003	3.9200e-003	215.0501

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.84138e+006											0.0000	204.9907	204.9907	3.9300e-003	3.7600e-003	206.2089
Day-Care Center	164700											0.0000	8.7890	8.7890	1.7000e-004	1.6000e-004	8.8413
Enclosed Parking with Elevator	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**213.7797**	**213.7797**	**4.1000e-003**	**3.9200e-003**	**215.0501**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.84138e+006											0.0000	204.9907	204.9907	3.9300e-003	3.7600e-003	206.2089
Day-Care Center	164700											0.0000	8.7890	8.7890	1.7000e-004	1.6000e-004	8.8413
Enclosed Parking with Elevator	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**213.7797**	**213.7797**	**4.1000e-003**	**3.9200e-003**	**215.0501**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.86787e+006	0.0000	0.0246	5.0800e-003	2.1291
Day-Care Center	41008.1	0.0000	5.4000e-004	1.1000e-004	0.0467
Enclosed Parking with Elevator	1.57599e+006	0.0000	0.0207	4.2900e-003	1.7964
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0458**	**9.4800e-003**	**3.9723**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.86787e+006	0.0000	0.0246	5.0800e-003	2.1291
Day-Care Center	41008.1	0.0000	5.4000e-004	1.1000e-004	0.0467
Enclosed Parking with Elevator	1.57599e+006	0.0000	0.0207	4.2900e-003	1.7964
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0458**	**9.4800e-003**	**3.9723**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	5.5322	5.5322	5.3200e-003	0.0000	5.6652
Unmitigated											0.0000	5.5322	5.5322	5.3200e-003	0.0000	5.6652

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	5.5322	5.5322	5.3200e-003	0.0000	5.6652
Total											**0.0000**	**5.5322**	**5.5322**	**5.3200e-003**	**0.0000**	**5.6652**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	5.5322	5.5322	5.3200e-003	0.0000	5.6652
Total											**0.0000**	**5.5322**	**5.5322**	**5.3200e-003**	**0.0000**	**5.6652**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	9.5411	0.9830	0.0238	41.2000
Unmitigated	9.5411	0.9830	0.0238	41.2000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	29.6451 / 18.6893	9.4050	0.9690	0.0234	40.6092
Day-Care Center	0.428896 / 1.10287	0.1361	0.0141	3.5000e-004	0.5908
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**9.5411**	**0.9830**	**0.0238**	**41.2000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	29.6451 / 18.6893	9.4050	0.9690	0.0234	40.6092
Day-Care Center	0.428896 / 1.10287	0.1361	0.0141	3.5000e-004	0.5908
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**9.5411**	**0.9830**	**0.0238**	**41.2000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	45.1249	2.6668	0.0000	111.7950
Unmitigated	45.1249	2.6668	0.0000	111.7950

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	209.3	42.4860	2.5109	0.0000	105.2573
Day-Care Center	13	2.6389	0.1560	0.0000	6.5377
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**45.1249**	**2.6668**	**0.0000**	**111.7950**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	209.3	42.4860	2.5109	0.0000	105.2573
Day-Care Center	13	2.6389	0.1560	0.0000	6.5377
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**45.1249**	**2.6668**	**0.0000**	**111.7950**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	2	50	402	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (300 - 600 HP)											0.0000	7.6540	7.6540	1.0700e-003	0.0000	7.6809
Total											**0.0000**	**7.6540**	**7.6540**	**1.0700e-003**	**0.0000**	**7.6809**

11.0 Vegetation

Balboa Reservoir, Operational: Variant Option - Phase 1

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	650.00	Space	5.85	260,000.00	0
User Defined Parking	0.00	User Defined Unit	0.00	0.00	0
City Park	4.00	Acre	4.00	174,240.00	0
Apartments Mid Rise	750.00	Dwelling Unit	19.74	750,000.00	2145
Condo/Townhouse	100.00	Dwelling Unit	6.25	100,000.00	286
Strip Mall	7.50	1000sqft	0.17	7,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	301	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Balboa Reservoir, Operational: Variant Option - Phase 1 - San Francisco County, Annual

Project Characteristics - CO2 Intensity Factor is adjusted to account for RPS decreases.

Land Use - Residential square footage scaled based on total residential gross ksf, consistent with the Project description.

Construction Phase - Construction is evaluated separately.

Off-road Equipment - xxx

Off-road Equipment -

Vehicle Trips - Operational trips based on May 14, 2019 Kittelson & Assoc traffic analysis.

Vehicle Emission Factors - Mobile emission factors updated based on EMFAC2017 for 2024.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumed 100 natural gas fireplaces, per Project Sponsor.

Energy Use - For Apartments and Condos: Assumed 10% electricity and lighting energy reduction, and 4.7% natural gas energy reduction consistent with 2019 Title 24. For all other landuses, assumed 10.7% electricity and lighting energy reduction, and 1% natural gas ener

Water And Wastewater -

Solid Waste -

Operational Off-Road Equipment -

Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	15600	22584
tblAreaCoating	Area_Residential_Exterior	573750	435375
tblAreaCoating	Area_Residential_Interior	1721250	1306125
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	50.00	30.00
tblEnergyUse	LightingElect	741.44	667.30
tblEnergyUse	LightingElect	1,001.10	900.99
tblEnergyUse	LightingElect	2.63	1.56
tblEnergyUse	LightingElect	5.00	4.36

tblEnergyUse	NT24E	3,277.06	3,054.10
tblEnergyUse	NT24E	4,109.59	3,795.01
tblEnergyUse	T24E	502.89	383.81
tblEnergyUse	T24E	231.62	184.07
tblEnergyUse	T24E	3.92	3.50
tblEnergyUse	T24E	2.35	2.00
tblEnergyUse	T24NG	8,824.58	5,827.60
tblEnergyUse	T24NG	25,448.35	19,159.11
tblEnergyUse	T24NG	3.92	3.96
tblFireplaces	NumberGas	112.50	0.00
tblFireplaces	NumberGas	15.00	100.00
tblFireplaces	NumberNoFireplace	30.00	750.00
tblFireplaces	NumberNoFireplace	4.00	0.00
tblFireplaces	NumberWood	127.50	0.00
tblFireplaces	NumberWood	17.00	0.00
tblFleetMix	FleetMixLandUseSubType	Enclosed Parking with Elevator	Apartments Mid Rise
tblFleetMix	FleetMixLandUseSubType	User Defined Parking	City Park
tblFleetMix	FleetMixLandUseSubType	City Park	Condo/Townhouse
tblFleetMix	FleetMixLandUseSubType	Apartments Mid Rise	Enclosed Parking with Elevator
tblFleetMix	FleetMixLandUseSubType	Condo/Townhouse	Strip Mall
tblFleetMix	FleetMixLandUseSubType	Strip Mall	User Defined Parking
tblFleetMix	HHD	9.2570e-003	0.00
tblFleetMix	HHD	9.2570e-003	0.00
tblFleetMix	HHD	9.2570e-003	0.00
tblFleetMix	HHD	9.2570e-003	0.00
tblFleetMix	HHD	9.2570e-003	0.00
tblFleetMix	HHD	9.2570e-003	0.05

tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.18
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.02
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.05
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD2	5.0770e-003	0.00
tblFleetMix	LHD2	5.0770e-003	0.00
tblFleetMix	LHD2	5.0770e-003	0.00

tblFleetMix	LHD2	5.0770e-003	0.00
tblFleetMix	LHD2	5.0770e-003	0.00
tblFleetMix	LHD2	5.0770e-003	0.09
tblFleetMix	MCY	6.2620e-003	0.00
tblFleetMix	MCY	6.2620e-003	0.00
tblFleetMix	MCY	6.2620e-003	0.00
tblFleetMix	MCY	6.2620e-003	0.00
tblFleetMix	MCY	6.2620e-003	0.00
tblFleetMix	MCY	6.2620e-003	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.42
tblFleetMix	MH	5.1900e-004	0.00
tblFleetMix	MH	5.1900e-004	0.00
tblFleetMix	MH	5.1900e-004	0.00
tblFleetMix	MH	5.1900e-004	0.00
tblFleetMix	MH	5.1900e-004	0.00
tblFleetMix	MH	5.1900e-004	0.00
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tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.19

tblFleetMix	OBUS	4.2880e-003	0.00
tblFleetMix	OBUS	4.2880e-003	0.00
tblFleetMix	OBUS	4.2880e-003	0.00
tblFleetMix	OBUS	4.2880e-003	0.00
tblFleetMix	OBUS	4.2880e-003	0.00
tblFleetMix	OBUS	4.2880e-003	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	SBUS	9.4500e-004	0.00
tblFleetMix	UBUS	3.5530e-003	0.00
tblFleetMix	UBUS	3.5530e-003	0.00
tblFleetMix	UBUS	3.5530e-003	0.00
tblFleetMix	UBUS	3.5530e-003	0.00
tblFleetMix	UBUS	3.5530e-003	0.00
tblFleetMix	UBUS	3.5530e-003	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	301
tblProjectCharacteristics	OperationalYear	2018	2024
tblVehicleEF	HHD	0.56	0.05
tblVehicleEF	HHD	0.38	0.35
tblVehicleEF	HHD	0.06	1.0000e-006
tblVehicleEF	HHD	1.74	4.91
tblVehicleEF	HHD	2.21	1.39
tblVehicleEF	HHD	4.51	0.01
tblVehicleEF	HHD	3,134.48	944.78

tblVehicleEF	HHD	1,887.93	1,827.00
tblVehicleEF	HHD	14.15	0.11
tblVehicleEF	HHD	9.2570e-003	8.5740e-003
tblVehicleEF	HHD	17.68	5.87
tblVehicleEF	HHD	3.02	3.67
tblVehicleEF	HHD	18.99	2.33
tblVehicleEF	HHD	0.03	5.9640e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.4530e-003	0.02
tblVehicleEF	HHD	1.4500e-004	2.0000e-006
tblVehicleEF	HHD	0.02	5.7060e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.5310e-003	8.7170e-003
tblVehicleEF	HHD	8.0860e-003	0.02
tblVehicleEF	HHD	1.3300e-004	2.0000e-006
tblVehicleEF	HHD	7.9000e-005	6.0000e-006
tblVehicleEF	HHD	4.0930e-003	3.5600e-004
tblVehicleEF	HHD	0.39	0.33
tblVehicleEF	HHD	5.6000e-005	4.0000e-006
tblVehicleEF	HHD	0.10	0.04
tblVehicleEF	HHD	6.6800e-004	2.4900e-004
tblVehicleEF	HHD	0.09	6.0000e-006
tblVehicleEF	HHD	0.03	7.9910e-003
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	2.1500e-004	1.0000e-006
tblVehicleEF	HHD	7.9000e-005	6.0000e-006

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tblVehicleEF	HHD	5.6000e-005	4.0000e-006
tblVehicleEF	HHD	0.48	0.40
tblVehicleEF	HHD	6.6800e-004	2.4900e-004
tblVehicleEF	HHD	0.10	6.0000e-006
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tblVehicleEF	LDA	4.2460e-003	0.04
tblVehicleEF	LDA	0.49	0.56
tblVehicleEF	LDA	1.00	2.13
tblVehicleEF	LDA	248.83	249.41
tblVehicleEF	LDA	52.61	49.94
tblVehicleEF	LDA	0.60	0.58
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.17
tblVehicleEF	LDA	2.0930e-003	1.7070e-003
tblVehicleEF	LDA	2.2530e-003	1.7140e-003
tblVehicleEF	LDA	1.9270e-003	1.5720e-003
tblVehicleEF	LDA	2.0710e-003	1.5760e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	9.2100e-003	7.6970e-003
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.20
tblVehicleEF	LDA	2.4900e-003	2.4670e-003
tblVehicleEF	LDA	5.4300e-004	4.9400e-004

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tblVehicleEF	LDA	0.08	0.09
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.22
tblVehicleEF	LDT1	5.9890e-003	3.3460e-003
tblVehicleEF	LDT1	8.2800e-003	0.05
tblVehicleEF	LDT1	0.74	0.77
tblVehicleEF	LDT1	1.81	2.29
tblVehicleEF	LDT1	310.75	301.05
tblVehicleEF	LDT1	66.21	60.36
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.06	0.05
tblVehicleEF	LDT1	0.10	0.21
tblVehicleEF	LDT1	2.3520e-003	1.9580e-003
tblVehicleEF	LDT1	2.5880e-003	1.9990e-003
tblVehicleEF	LDT1	2.1640e-003	1.8020e-003
tblVehicleEF	LDT1	2.3800e-003	1.8380e-003
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.16	0.12
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.01	0.01
tblVehicleEF	LDT1	0.13	0.07
tblVehicleEF	LDT1	0.11	0.25
tblVehicleEF	LDT1	3.1140e-003	2.9790e-003
tblVehicleEF	LDT1	6.9300e-004	5.9700e-004

tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.16	0.12
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.13	0.07
tblVehicleEF	LDT1	0.12	0.28
tblVehicleEF	LDT2	5.0070e-003	3.0070e-003
tblVehicleEF	LDT2	5.1920e-003	0.06
tblVehicleEF	LDT2	0.64	0.71
tblVehicleEF	LDT2	1.22	2.68
tblVehicleEF	LDT2	350.14	318.38
tblVehicleEF	LDT2	73.70	64.11
tblVehicleEF	LDT2	0.19	0.17
tblVehicleEF	LDT2	0.06	0.05
tblVehicleEF	LDT2	0.08	0.23
tblVehicleEF	LDT2	2.1760e-003	1.7430e-003
tblVehicleEF	LDT2	2.3270e-003	1.6970e-003
tblVehicleEF	LDT2	2.0010e-003	1.6040e-003
tblVehicleEF	LDT2	2.1400e-003	1.5600e-003
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.09	0.10
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.07	0.27
tblVehicleEF	LDT2	3.5050e-003	3.1490e-003
tblVehicleEF	LDT2	7.5700e-004	6.3400e-004

tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.09	0.10
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LHD1	5.6310e-003	5.7060e-003
tblVehicleEF	LHD1	0.01	6.6600e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.20
tblVehicleEF	LHD1	0.75	0.58
tblVehicleEF	LHD1	2.33	1.10
tblVehicleEF	LHD1	8.76	8.63
tblVehicleEF	LHD1	690.52	806.60
tblVehicleEF	LHD1	35.12	12.89
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.60	0.34
tblVehicleEF	LHD1	1.03	0.33
tblVehicleEF	LHD1	7.0900e-004	6.8000e-004
tblVehicleEF	LHD1	9.9640e-003	9.5380e-003
tblVehicleEF	LHD1	9.9640e-003	6.6230e-003
tblVehicleEF	LHD1	8.1300e-004	2.4000e-004
tblVehicleEF	LHD1	6.7800e-004	6.5100e-004
tblVehicleEF	LHD1	2.4910e-003	2.3840e-003
tblVehicleEF	LHD1	9.4940e-003	6.2890e-003
tblVehicleEF	LHD1	7.4800e-004	2.2100e-004

tblVehicleEF	LHD1	1.8860e-003	1.4240e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2420e-003	9.2100e-004
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.28	0.16
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	8.8000e-005	8.4000e-005
tblVehicleEF	LHD1	6.7840e-003	7.8940e-003
tblVehicleEF	LHD1	3.9500e-004	1.2800e-004
tblVehicleEF	LHD1	1.8860e-003	1.4240e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.2420e-003	9.2100e-004
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.28	0.16
tblVehicleEF	LHD1	0.26	0.07
tblVehicleEF	LHD2	3.2090e-003	3.3650e-003
tblVehicleEF	LHD2	6.7110e-003	6.0180e-003
tblVehicleEF	LHD2	5.6100e-003	7.6680e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.50	0.52
tblVehicleEF	LHD2	1.11	0.65
tblVehicleEF	LHD2	13.84	13.47
tblVehicleEF	LHD2	698.44	765.11
tblVehicleEF	LHD2	23.92	8.40
tblVehicleEF	LHD2	5.0770e-003	5.5390e-003

tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.44	0.47
tblVehicleEF	LHD2	0.40	0.19
tblVehicleEF	LHD2	1.1970e-003	1.3540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.9100e-004	1.2600e-004
tblVehicleEF	LHD2	1.1450e-003	1.2960e-003
tblVehicleEF	LHD2	2.6920e-003	2.6650e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5900e-004	1.1600e-004
tblVehicleEF	LHD2	5.8600e-004	8.0100e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.8300e-004	5.0800e-004
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.06	0.09
tblVehicleEF	LHD2	0.08	0.04
tblVehicleEF	LHD2	1.3500e-004	1.2900e-004
tblVehicleEF	LHD2	6.7910e-003	7.3990e-003
tblVehicleEF	LHD2	2.5900e-004	8.3000e-005
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tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	3.8300e-004	5.0800e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.06	0.09

tblVehicleEF	LHD2	0.08	0.04
tblVehicleEF	MCY	0.56	0.40
tblVehicleEF	MCY	0.17	0.25
tblVehicleEF	MCY	20.61	20.63
tblVehicleEF	MCY	10.18	9.07
tblVehicleEF	MCY	193.06	229.85
tblVehicleEF	MCY	46.00	61.66
tblVehicleEF	MCY	6.2620e-003	7.1020e-003
tblVehicleEF	MCY	1.19	1.19
tblVehicleEF	MCY	0.33	0.28
tblVehicleEF	MCY	2.5080e-003	2.3850e-003
tblVehicleEF	MCY	3.7870e-003	2.9930e-003
tblVehicleEF	MCY	2.3460e-003	2.2300e-003
tblVehicleEF	MCY	3.5710e-003	2.8200e-003
tblVehicleEF	MCY	0.79	0.79
tblVehicleEF	MCY	0.80	0.78
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	2.80	2.80
tblVehicleEF	MCY	0.84	0.70
tblVehicleEF	MCY	2.26	1.99
tblVehicleEF	MCY	2.3520e-003	2.2750e-003
tblVehicleEF	MCY	6.9300e-004	6.1000e-004
tblVehicleEF	MCY	0.79	0.79
tblVehicleEF	MCY	0.80	0.78
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	3.46	3.47
tblVehicleEF	MCY	0.84	0.70

tblVehicleEF	MCY	2.46	2.16
tblVehicleEF	MDV	7.1350e-003	3.0460e-003
tblVehicleEF	MDV	9.0500e-003	0.06
tblVehicleEF	MDV	0.80	0.69
tblVehicleEF	MDV	1.79	2.72
tblVehicleEF	MDV	460.22	375.26
tblVehicleEF	MDV	94.54	73.63
tblVehicleEF	MDV	0.09	0.11
tblVehicleEF	MDV	0.08	0.05
tblVehicleEF	MDV	0.14	0.23
tblVehicleEF	MDV	2.2400e-003	1.8270e-003
tblVehicleEF	MDV	2.3440e-003	1.7490e-003
tblVehicleEF	MDV	2.0640e-003	1.6850e-003
tblVehicleEF	MDV	2.1550e-003	1.6080e-003
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.11	0.09
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.02	0.01
tblVehicleEF	MDV	0.09	0.05
tblVehicleEF	MDV	0.12	0.27
tblVehicleEF	MDV	4.6020e-003	3.7080e-003
tblVehicleEF	MDV	9.7600e-004	7.2900e-004
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.11	0.09
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.09	0.05

tblVehicleEF	MDV	0.13	0.30
tblVehicleEF	MH	0.02	7.9410e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.01	0.78
tblVehicleEF	MH	4.36	1.96
tblVehicleEF	MH	1,185.81	1,444.02
tblVehicleEF	MH	56.72	17.21
tblVehicleEF	MH	5.1900e-004	5.8400e-004
tblVehicleEF	MH	0.83	0.98
tblVehicleEF	MH	0.62	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.0110e-003	2.8400e-004
tblVehicleEF	MH	3.2230e-003	3.2780e-003
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	9.3000e-004	2.6100e-004
tblVehicleEF	MH	0.34	0.38
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.15	0.15
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	0.01	9.9170e-003
tblVehicleEF	MH	0.24	0.08
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.4300e-004	1.7000e-004
tblVehicleEF	MH	0.34	0.38
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.15	0.15

tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.01	9.9170e-003
tblVehicleEF	MH	0.27	0.09
tblVehicleEF	MHD	0.02	3.1870e-003
tblVehicleEF	MHD	3.4540e-003	1.3420e-003
tblVehicleEF	MHD	0.05	7.5740e-003
tblVehicleEF	MHD	0.31	0.50
tblVehicleEF	MHD	0.30	0.19
tblVehicleEF	MHD	4.66	0.85
tblVehicleEF	MHD	155.32	115.14
tblVehicleEF	MHD	1,179.47	1,042.42
tblVehicleEF	MHD	51.33	7.73
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	0.45	0.72
tblVehicleEF	MHD	1.09	1.42
tblVehicleEF	MHD	12.05	1.80
tblVehicleEF	MHD	1.5900e-004	6.2700e-004
tblVehicleEF	MHD	3.1450e-003	6.7340e-003
tblVehicleEF	MHD	7.2000e-004	8.6000e-005
tblVehicleEF	MHD	1.5200e-004	6.0000e-004
tblVehicleEF	MHD	3.0060e-003	6.4390e-003
tblVehicleEF	MHD	6.6200e-004	7.9000e-005
tblVehicleEF	MHD	7.5300e-004	3.0600e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.8600e-004	1.9900e-004
tblVehicleEF	MHD	0.04	0.01

tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.29	0.04
tblVehicleEF	MHD	1.4920e-003	1.0890e-003
tblVehicleEF	MHD	0.01	9.9130e-003
tblVehicleEF	MHD	5.9500e-004	7.7000e-005
tblVehicleEF	MHD	7.5300e-004	3.0600e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	4.8600e-004	1.9900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	OBUS	0.01	6.6390e-003
tblVehicleEF	OBUS	5.3460e-003	3.7010e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.24	0.61
tblVehicleEF	OBUS	0.42	0.48
tblVehicleEF	OBUS	4.75	1.70
tblVehicleEF	OBUS	142.11	100.56
tblVehicleEF	OBUS	1,309.44	1,333.01
tblVehicleEF	OBUS	64.09	14.28
tblVehicleEF	OBUS	4.2880e-003	3.4080e-003
tblVehicleEF	OBUS	0.32	0.41
tblVehicleEF	OBUS	1.10	1.59
tblVehicleEF	OBUS	3.67	1.17
tblVehicleEF	OBUS	2.9000e-005	1.3400e-004
tblVehicleEF	OBUS	3.1040e-003	8.1250e-003

tblVehicleEF	OBUS	6.6000e-004	1.4000e-004
tblVehicleEF	OBUS	2.8000e-005	1.2900e-004
tblVehicleEF	OBUS	2.9580e-003	7.7640e-003
tblVehicleEF	OBUS	6.0600e-004	1.2900e-004
tblVehicleEF	OBUS	1.0980e-003	1.0910e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	6.0200e-004	5.6600e-004
tblVehicleEF	OBUS	0.05	0.03
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.30	0.08
tblVehicleEF	OBUS	1.3670e-003	9.5500e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.2400e-004	1.4100e-004
tblVehicleEF	OBUS	1.0980e-003	1.0910e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	6.0200e-004	5.6600e-004
tblVehicleEF	OBUS	0.06	0.03
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.33	0.09
tblVehicleEF	SBUS	0.81	0.16
tblVehicleEF	SBUS	9.8340e-003	3.3570e-003
tblVehicleEF	SBUS	0.06	0.01
tblVehicleEF	SBUS	8.09	5.87
tblVehicleEF	SBUS	0.59	0.28
tblVehicleEF	SBUS	7.19	1.80

tblVehicleEF	SBUS	1,103.84	390.07
tblVehicleEF	SBUS	1,057.81	932.50
tblVehicleEF	SBUS	57.01	11.79
tblVehicleEF	SBUS	9.4500e-004	1.0360e-003
tblVehicleEF	SBUS	7.90	2.10
tblVehicleEF	SBUS	3.38	1.47
tblVehicleEF	SBUS	11.83	1.21
tblVehicleEF	SBUS	7.0490e-003	1.4420e-003
tblVehicleEF	SBUS	0.01	9.6480e-003
tblVehicleEF	SBUS	0.02	9.6500e-003
tblVehicleEF	SBUS	6.8100e-004	1.4900e-004
tblVehicleEF	SBUS	6.7440e-003	1.3800e-003
tblVehicleEF	SBUS	2.6370e-003	2.4120e-003
tblVehicleEF	SBUS	0.02	9.2040e-003
tblVehicleEF	SBUS	6.2600e-004	1.3700e-004
tblVehicleEF	SBUS	2.7710e-003	1.1660e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.96	0.71
tblVehicleEF	SBUS	1.5500e-003	6.2300e-004
tblVehicleEF	SBUS	0.09	0.03
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.38	0.07
tblVehicleEF	SBUS	0.01	3.7520e-003
tblVehicleEF	SBUS	0.01	9.0210e-003
tblVehicleEF	SBUS	6.9400e-004	1.1700e-004
tblVehicleEF	SBUS	2.7710e-003	1.1660e-003
tblVehicleEF	SBUS	0.03	0.01

tblVehicleEF	SBUS	1.38	1.03
tblVehicleEF	SBUS	1.5500e-003	6.2300e-004
tblVehicleEF	SBUS	0.11	0.04
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.42	0.08
tblVehicleEF	UBUS	0.42	1.38
tblVehicleEF	UBUS	0.05	0.00
tblVehicleEF	UBUS	8.65	10.31
tblVehicleEF	UBUS	9.26	0.00
tblVehicleEF	UBUS	2,259.15	1,709.68
tblVehicleEF	UBUS	65.85	0.00
tblVehicleEF	UBUS	3.5530e-003	6.4740e-003
tblVehicleEF	UBUS	15.81	0.75
tblVehicleEF	UBUS	17.18	0.00
tblVehicleEF	UBUS	0.69	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.30	5.4620e-003
tblVehicleEF	UBUS	1.1580e-003	0.00
tblVehicleEF	UBUS	0.29	0.03
tblVehicleEF	UBUS	3.0000e-003	8.6540e-003
tblVehicleEF	UBUS	0.29	5.2260e-003
tblVehicleEF	UBUS	1.0650e-003	0.00
tblVehicleEF	UBUS	3.1800e-003	0.00
tblVehicleEF	UBUS	0.08	0.00
tblVehicleEF	UBUS	1.5890e-003	0.00
tblVehicleEF	UBUS	1.27	0.02
tblVehicleEF	UBUS	0.03	0.00

tblVehicleEF	UBUS	0.62	0.00
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	8.2300e-004	0.00
tblVehicleEF	UBUS	3.1800e-003	0.00
tblVehicleEF	UBUS	0.08	0.00
tblVehicleEF	UBUS	1.5890e-003	0.00
tblVehicleEF	UBUS	1.79	1.41
tblVehicleEF	UBUS	0.03	0.00
tblVehicleEF	UBUS	0.68	0.00
tblVehicleTrips	ST_TR	6.39	1.77
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	5.67	1.77
tblVehicleTrips	ST_TR	42.04	38.00
tblVehicleTrips	ST_TR	0.00	27.15
tblVehicleTrips	SU_TR	5.86	1.77
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	4.84	1.77
tblVehicleTrips	SU_TR	20.43	38.00
tblVehicleTrips	SU_TR	0.00	27.15
tblVehicleTrips	WD_TR	6.65	1.77
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	5.81	1.77
tblVehicleTrips	WD_TR	44.32	38.00
tblVehicleTrips	WD_TR	0.00	27.15
tblWoodstoves	NumberCatalytic	15.00	0.00
tblWoodstoves	NumberNoncatalytic	15.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021											0.0000	52.6306	52.6306	0.0144	0.0000	52.9903
Maximum											**0.0000**	**52.6306**	**52.6306**	**0.0144**	**0.0000**	**52.9903**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021											0.0000	52.6305	52.6305	0.0144	0.0000	52.9902
Maximum											**0.0000**	**52.6305**	**52.6305**	**0.0144**	**0.0000**	**52.9902**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											1.5597	22.8052	24.3649	0.0175	2.3000e-004	24.8694
Energy											0.0000	1,139.3853	1,139.3853	0.0746	0.0220	1,147.8007
Mobile											0.0000	1,081.4609	1,081.4609	0.0401	0.0000	1,082.4626
Stationary											0.0000	22.9621	22.9621	3.2200e-003	0.0000	23.0426
Waste											81.0381	0.0000	81.0381	4.7892	0.0000	200.7683
Water											17.7461	60.4484	78.1945	1.8285	0.0442	137.0916
Total											**100.3438**	**2,327.0619**	**2,427.4057**	**6.7530**	**0.0665**	**2,616.0352**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											1.5597	22.8052	24.3649	0.0175	2.3000e-004	24.8694
Energy											0.0000	1,139.3853	1,139.3853	0.0746	0.0220	1,147.8007
Mobile											0.0000	1,081.4609	1,081.4609	0.0401	0.0000	1,082.4626
Stationary											0.0000	22.9621	22.9621	3.2200e-003	0.0000	23.0426
Waste											81.0381	0.0000	81.0381	4.7892	0.0000	200.7683
Water											17.7461	60.4484	78.1945	1.8285	0.0442	137.0916
Total											**100.3438**	**2,327.0619**	**2,427.4057**	**6.7530**	**0.0665**	**2,616.0352**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	2/11/2021	5	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 5.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total											**0.0000**	**51.0012**	**51.0012**	**0.0144**	**0.0000**	**51.3601**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.6294	1.6294	3.0000e-005	0.0000	1.6302
Total											**0.0000**	**1.6294**	**1.6294**	**3.0000e-005**	**0.0000**	**1.6302**

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total											**0.0000**	**51.0011**	**51.0011**	**0.0144**	**0.0000**	**51.3600**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.6294	1.6294	3.0000e-005	0.0000	1.6302
Total											**0.0000**	**1.6294**	**1.6294**	**3.0000e-005**	**0.0000**	**1.6302**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	1,081.4609	1,081.4609	0.0401	0.0000	1,082.4626
Unmitigated											0.0000	1,081.4609	1,081.4609	0.0401	0.0000	1,082.4626

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,327.50	1,327.50	1327.50	3,066,004	3,066,004
City Park	0.00	0.00	0.00		
Condo/Townhouse	177.00	177.00	177.00	408,800	408,800
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	285.00	285.00	285.00	438,909	438,909
User Defined Parking	0.00	0.00	0.00		
Total	1,789.50	1,789.50	1,789.50	3,913,714	3,913,714

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
User Defined Parking	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
City Park	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Condo/Townhouse	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Enclosed Parking with Elevator	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Strip Mall	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
User Defined Parking	0.179362	0.016959	0.053679	0.420000	0.000000	0.090000	0.190000	0.050000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Balboa Reservoir, Operational: Variant Option - Phase 1 - San Francisco County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	683.4285	683.4285	0.0659	0.0136	689.1344
Electricity Unmitigated											0.0000	683.4285	683.4285	0.0659	0.0136	689.1344
NaturalGas Mitigated											0.0000	455.9568	455.9568	8.7400e-003	8.3600e-003	458.6663
NaturalGas Unmitigated											0.0000	455.9568	455.9568	8.7400e-003	8.3600e-003	458.6663

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	6.33195e+006											0.0000	337.8968	337.8968	6.4800e-003	6.1900e-003	339.9047
City Park	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	2.17741e+006											0.0000	116.1950	116.1950	2.2300e-003	2.1300e-003	116.8854
Enclosed Parking with Elevator	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	34950											0.0000	1.8651	1.8651	4.0000e-005	3.0000e-005	1.8762
User Defined Parking	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**455.9568**	**455.9568**	**8.7500e-003**	**8.3500e-003**	**458.6663**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	6.33195e+006											0.0000	337.8968	337.8968	6.4800e-003	6.1900e-003	339.9047
City Park	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	2.17741e+006											0.0000	116.1950	116.1950	2.2300e-003	2.1300e-003	116.8854
Enclosed Parking with Elevator	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	34950											0.0000	1.8651	1.8651	4.0000e-005	3.0000e-005	1.8762
User Defined Parking	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**455.9568**	**455.9568**	**8.7500e-003**	**8.3500e-003**	**458.6663**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	3.0789e+006	420.3663	0.0405	8.3800e-003	423.8759
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	488007	66.6282	6.4200e-003	1.3300e-003	67.1845
Enclosed Parking with Elevator	1.36586e+006	186.4827	0.0180	3.7200e-003	188.0396
Strip Mall	72886.2	9.9513	9.6000e-004	2.0000e-004	10.0343
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**683.4285**	**0.0659**	**0.0136**	**689.1343**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	3.0789e+006	420.3663	0.0405	8.3800e-003	423.8759
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	488007	66.6282	6.4200e-003	1.3300e-003	67.1845
Enclosed Parking with Elevator	1.36586e+006	186.4827	0.0180	3.7200e-003	188.0396
Strip Mall	72886.2	9.9513	9.6000e-004	2.0000e-004	10.0343
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**683.4285**	**0.0659**	**0.0136**	**689.1343**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											1.5597	22.8052	24.3649	0.0175	2.3000e-004	24.8694
Unmitigated											1.5597	22.8052	24.3649	0.0175	2.3000e-004	24.8694

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											1.5597	12.4839	14.0436	7.5300e-003	2.3000e-004	14.3001
Landscaping											0.0000	10.3213	10.3213	9.9200e-003	0.0000	10.5694
Total											**1.5597**	**22.8052**	**24.3649**	**0.0175**	**2.3000e-004**	**24.8694**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											1.5597	12.4839	14.0436	7.5300e-003	2.3000e-004	14.3001
Landscaping											0.0000	10.3213	10.3213	9.9200e-003	0.0000	10.5694
Total											**1.5597**	**22.8052**	**24.3649**	**0.0175**	**2.3000e-004**	**24.8694**

7.0 Water Detail

7.1 Mitigation Measures Water

Balboa Reservoir, Operational: Variant Option - Phase 1 - San Francisco County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	78.1945	1.8285	0.0442	137.0916
Unmitigated	78.1945	1.8285	0.0442	137.0916

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	48.8655 / 30.8065	66.3244	1.5972	0.0386	117.7598
City Park	0 / 4.76593	2.2774	2.2000e-004	5.0000e-005	2.2965
Condo/Townhouse	6.5154 / 4.10754	8.8433	0.2130	5.1500e-003	15.7013
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.555544 / 0.340495	0.7494	0.0182	4.4000e-004	1.3341
User Defined Parking	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**78.1945**	**1.8285**	**0.0443**	**137.0916**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	48.8655 / 30.8065	66.3244	1.5972	0.0386	117.7598
City Park	0 / 4.76593	2.2774	2.2000e-004	5.0000e-005	2.2965
Condo/Townhouse	6.5154 / 4.10754	8.8433	0.2130	5.1500e-003	15.7013
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.555544 / 0.340495	0.7494	0.0182	4.4000e-004	1.3341
User Defined Parking	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**78.1945**	**1.8285**	**0.0443**	**137.0916**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	81.0381	4.7892	0.0000	200.7683
Unmitigated	81.0381	4.7892	0.0000	200.7683

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	345	70.0319	4.1388	0.0000	173.5010
City Park	0.34	0.0690	4.0800e-003	0.0000	0.1710
Condo/Townhouse	46	9.3376	0.5518	0.0000	23.1335
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	7.88	1.5996	0.0945	0.0000	3.9629
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**81.0381**	**4.7892**	**0.0000**	**200.7683**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	345	70.0319	4.1388	0.0000	173.5010
City Park	0.34	0.0690	4.0800e-003	0.0000	0.1710
Condo/Townhouse	46	9.3376	0.5518	0.0000	23.1335
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	7.88	1.5996	0.0945	0.0000	3.9629
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**81.0381**	**4.7892**	**0.0000**	**200.7683**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	3	2	50	402	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (300 - 600 HP)											0.0000	22.9621	22.9621	3.2200e-003	0.0000	23.0426
Total											**0.0000**	**22.9621**	**22.9621**	**3.2200e-003**	**0.0000**	**23.0426**

11.0 Vegetation

Balboa Reservoir, Operational: Variant Option - Phase 1

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	650.00	Space	5.85	260,000.00	0
User Defined Parking	0.00	User Defined Unit	0.00	0.00	0
City Park	4.00	Acre	4.00	174,240.00	0
Apartments Mid Rise	750.00	Dwelling Unit	19.74	750,000.00	2145
Condo/Townhouse	100.00	Dwelling Unit	6.25	100,000.00	286
Strip Mall	7.50	1000sqft	0.17	7,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Balboa Reservoir, Operational: Variant Option - Phase 1 - San Francisco County, Annual

Project Characteristics - CO2 Intensity Factor is adjusted to account for RPS decreases.

Land Use - Residential square footage scaled based on total residential gross ksf, consistent with the Project description.

Construction Phase - Construction is evaluated separately.

Off-road Equipment - xxx

Off-road Equipment -

Vehicle Trips - Operational trips based on May 14, 2019 Kittelson & Assoc traffic analysis.

Vehicle Emission Factors - Mobile emission factors updated based on EMFAC2017 for 2024.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumed 100 natural gas fireplaces, per Project Sponsor.

Energy Use - For Apartments and Condos: Assumed 10% electricity and lighting energy reduction, and 4.7% natural gas energy reduction consistent with 2019 Title 24. For all other landuses, assumed 10.7% electricity and lighting energy reduction, and 1% natural gas ener

Water And Wastewater -

Solid Waste -

Operational Off-Road Equipment -

Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	15600	22584
tblAreaCoating	Area_Residential_Exterior	573750	435375
tblAreaCoating	Area_Residential_Interior	1721250	1306125
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	50.00	30.00
tblEnergyUse	LightingElect	741.44	667.30
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tblEnergyUse	LightingElect	2.63	1.56
tblEnergyUse	LightingElect	5.00	4.36

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tblEnergyUse	NT24E	4,109.59	3,795.01
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tblEnergyUse	T24E	231.62	184.07
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tblEnergyUse	T24E	2.35	2.00
tblEnergyUse	T24NG	8,824.58	5,827.60
tblEnergyUse	T24NG	25,448.35	19,159.11
tblEnergyUse	T24NG	3.92	3.96
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tblFireplaces	NumberNoFireplace	30.00	750.00
tblFireplaces	NumberNoFireplace	4.00	0.00
tblFireplaces	NumberWood	127.50	0.00
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tblFleetMix	FleetMixLandUseSubType	User Defined Parking	City Park
tblFleetMix	FleetMixLandUseSubType	City Park	Condo/Townhouse
tblFleetMix	FleetMixLandUseSubType	Apartments Mid Rise	Enclosed Parking with Elevator
tblFleetMix	FleetMixLandUseSubType	Condo/Townhouse	Strip Mall
tblFleetMix	FleetMixLandUseSubType	Strip Mall	User Defined Parking
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tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.01	0.01

tblVehicleEF	LDT1	0.13	0.07
tblVehicleEF	LDT1	0.11	0.25
tblVehicleEF	LDT1	3.1140e-003	2.9790e-003
tblVehicleEF	LDT1	6.9300e-004	5.9700e-004
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.16	0.12
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.13	0.07
tblVehicleEF	LDT1	0.12	0.28
tblVehicleEF	LDT2	5.0070e-003	3.0070e-003
tblVehicleEF	LDT2	5.1920e-003	0.06
tblVehicleEF	LDT2	0.64	0.71
tblVehicleEF	LDT2	1.22	2.68
tblVehicleEF	LDT2	350.14	318.38
tblVehicleEF	LDT2	73.70	64.11
tblVehicleEF	LDT2	0.19	0.17
tblVehicleEF	LDT2	0.06	0.05
tblVehicleEF	LDT2	0.08	0.23
tblVehicleEF	LDT2	2.1760e-003	1.7430e-003
tblVehicleEF	LDT2	2.3270e-003	1.6970e-003
tblVehicleEF	LDT2	2.0010e-003	1.6040e-003
tblVehicleEF	LDT2	2.1400e-003	1.5600e-003
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.09	0.10
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.01	0.01

tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.07	0.27
tblVehicleEF	LDT2	3.5050e-003	3.1490e-003
tblVehicleEF	LDT2	7.5700e-004	6.3400e-004
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.09	0.10
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LHD1	5.6310e-003	5.7060e-003
tblVehicleEF	LHD1	0.01	6.6600e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.15	0.20
tblVehicleEF	LHD1	0.75	0.58
tblVehicleEF	LHD1	2.33	1.10
tblVehicleEF	LHD1	8.76	8.63
tblVehicleEF	LHD1	690.52	806.60
tblVehicleEF	LHD1	35.12	12.89
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.60	0.34
tblVehicleEF	LHD1	1.03	0.33
tblVehicleEF	LHD1	7.0900e-004	6.8000e-004
tblVehicleEF	LHD1	9.9640e-003	9.5380e-003
tblVehicleEF	LHD1	9.9640e-003	6.6230e-003
tblVehicleEF	LHD1	8.1300e-004	2.4000e-004

tblVehicleEF	LHD1	6.7800e-004	6.5100e-004
tblVehicleEF	LHD1	2.4910e-003	2.3840e-003
tblVehicleEF	LHD1	9.4940e-003	6.2890e-003
tblVehicleEF	LHD1	7.4800e-004	2.2100e-004
tblVehicleEF	LHD1	1.8860e-003	1.4240e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.2420e-003	9.2100e-004
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.28	0.16
tblVehicleEF	LHD1	0.23	0.07
tblVehicleEF	LHD1	8.8000e-005	8.4000e-005
tblVehicleEF	LHD1	6.7840e-003	7.8940e-003
tblVehicleEF	LHD1	3.9500e-004	1.2800e-004
tblVehicleEF	LHD1	1.8860e-003	1.4240e-003
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.2420e-003	9.2100e-004
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.28	0.16
tblVehicleEF	LHD1	0.26	0.07
tblVehicleEF	LHD2	3.2090e-003	3.3650e-003
tblVehicleEF	LHD2	6.7110e-003	6.0180e-003
tblVehicleEF	LHD2	5.6100e-003	7.6680e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.50	0.52
tblVehicleEF	LHD2	1.11	0.65

tblVehicleEF	LHD2	13.84	13.47
tblVehicleEF	LHD2	698.44	765.11
tblVehicleEF	LHD2	23.92	8.40
tblVehicleEF	LHD2	5.0770e-003	5.5390e-003
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.44	0.47
tblVehicleEF	LHD2	0.40	0.19
tblVehicleEF	LHD2	1.1970e-003	1.3540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.9100e-004	1.2600e-004
tblVehicleEF	LHD2	1.1450e-003	1.2960e-003
tblVehicleEF	LHD2	2.6920e-003	2.6650e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.5900e-004	1.1600e-004
tblVehicleEF	LHD2	5.8600e-004	8.0100e-004
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.8300e-004	5.0800e-004
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	0.06	0.09
tblVehicleEF	LHD2	0.08	0.04
tblVehicleEF	LHD2	1.3500e-004	1.2900e-004
tblVehicleEF	LHD2	6.7910e-003	7.3990e-003
tblVehicleEF	LHD2	2.5900e-004	8.3000e-005
tblVehicleEF	LHD2	5.8600e-004	8.0100e-004
tblVehicleEF	LHD2	0.03	0.04

tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	3.8300e-004	5.0800e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.06	0.09
tblVehicleEF	LHD2	0.08	0.04
tblVehicleEF	MCY	0.56	0.40
tblVehicleEF	MCY	0.17	0.25
tblVehicleEF	MCY	20.61	20.63
tblVehicleEF	MCY	10.18	9.07
tblVehicleEF	MCY	193.06	229.85
tblVehicleEF	MCY	46.00	61.66
tblVehicleEF	MCY	6.2620e-003	7.1020e-003
tblVehicleEF	MCY	1.19	1.19
tblVehicleEF	MCY	0.33	0.28
tblVehicleEF	MCY	2.5080e-003	2.3850e-003
tblVehicleEF	MCY	3.7870e-003	2.9930e-003
tblVehicleEF	MCY	2.3460e-003	2.2300e-003
tblVehicleEF	MCY	3.5710e-003	2.8200e-003
tblVehicleEF	MCY	0.79	0.79
tblVehicleEF	MCY	0.80	0.78
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	2.80	2.80
tblVehicleEF	MCY	0.84	0.70
tblVehicleEF	MCY	2.26	1.99
tblVehicleEF	MCY	2.3520e-003	2.2750e-003
tblVehicleEF	MCY	6.9300e-004	6.1000e-004
tblVehicleEF	MCY	0.79	0.79

tblVehicleEF	MCY	0.80	0.78
tblVehicleEF	MCY	0.51	0.51
tblVehicleEF	MCY	3.46	3.47
tblVehicleEF	MCY	0.84	0.70
tblVehicleEF	MCY	2.46	2.16
tblVehicleEF	MDV	7.1350e-003	3.0460e-003
tblVehicleEF	MDV	9.0500e-003	0.06
tblVehicleEF	MDV	0.80	0.69
tblVehicleEF	MDV	1.79	2.72
tblVehicleEF	MDV	460.22	375.26
tblVehicleEF	MDV	94.54	73.63
tblVehicleEF	MDV	0.09	0.11
tblVehicleEF	MDV	0.08	0.05
tblVehicleEF	MDV	0.14	0.23
tblVehicleEF	MDV	2.2400e-003	1.8270e-003
tblVehicleEF	MDV	2.3440e-003	1.7490e-003
tblVehicleEF	MDV	2.0640e-003	1.6850e-003
tblVehicleEF	MDV	2.1550e-003	1.6080e-003
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.11	0.09
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.02	0.01
tblVehicleEF	MDV	0.09	0.05
tblVehicleEF	MDV	0.12	0.27
tblVehicleEF	MDV	4.6020e-003	3.7080e-003
tblVehicleEF	MDV	9.7600e-004	7.2900e-004
tblVehicleEF	MDV	0.04	0.04

tblVehicleEF	MDV	0.11	0.09
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.09	0.05
tblVehicleEF	MDV	0.13	0.30
tblVehicleEF	MH	0.02	7.9410e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.01	0.78
tblVehicleEF	MH	4.36	1.96
tblVehicleEF	MH	1,185.81	1,444.02
tblVehicleEF	MH	56.72	17.21
tblVehicleEF	MH	5.1900e-004	5.8400e-004
tblVehicleEF	MH	0.83	0.98
tblVehicleEF	MH	0.62	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	1.0110e-003	2.8400e-004
tblVehicleEF	MH	3.2230e-003	3.2780e-003
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	9.3000e-004	2.6100e-004
tblVehicleEF	MH	0.34	0.38
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.15	0.15
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	0.01	9.9170e-003
tblVehicleEF	MH	0.24	0.08
tblVehicleEF	MH	0.01	0.01

tblVehicleEF	MH	6.4300e-004	1.7000e-004
tblVehicleEF	MH	0.34	0.38
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.15	0.15
tblVehicleEF	MH	0.07	0.07
tblVehicleEF	MH	0.01	9.9170e-003
tblVehicleEF	MH	0.27	0.09
tblVehicleEF	MHD	0.02	3.1870e-003
tblVehicleEF	MHD	3.4540e-003	1.3420e-003
tblVehicleEF	MHD	0.05	7.5740e-003
tblVehicleEF	MHD	0.31	0.50
tblVehicleEF	MHD	0.30	0.19
tblVehicleEF	MHD	4.66	0.85
tblVehicleEF	MHD	155.32	115.14
tblVehicleEF	MHD	1,179.47	1,042.42
tblVehicleEF	MHD	51.33	7.73
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	0.45	0.72
tblVehicleEF	MHD	1.09	1.42
tblVehicleEF	MHD	12.05	1.80
tblVehicleEF	MHD	1.5900e-004	6.2700e-004
tblVehicleEF	MHD	3.1450e-003	6.7340e-003
tblVehicleEF	MHD	7.2000e-004	8.6000e-005
tblVehicleEF	MHD	1.5200e-004	6.0000e-004
tblVehicleEF	MHD	3.0060e-003	6.4390e-003
tblVehicleEF	MHD	6.6200e-004	7.9000e-005
tblVehicleEF	MHD	7.5300e-004	3.0600e-004

tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.8600e-004	1.9900e-004
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.29	0.04
tblVehicleEF	MHD	1.4920e-003	1.0890e-003
tblVehicleEF	MHD	0.01	9.9130e-003
tblVehicleEF	MHD	5.9500e-004	7.7000e-005
tblVehicleEF	MHD	7.5300e-004	3.0600e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	4.8600e-004	1.9900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.32	0.04
tblVehicleEF	OBUS	0.01	6.6390e-003
tblVehicleEF	OBUS	5.3460e-003	3.7010e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.24	0.61
tblVehicleEF	OBUS	0.42	0.48
tblVehicleEF	OBUS	4.75	1.70
tblVehicleEF	OBUS	142.11	100.56
tblVehicleEF	OBUS	1,309.44	1,333.01
tblVehicleEF	OBUS	64.09	14.28
tblVehicleEF	OBUS	4.2880e-003	3.4080e-003
tblVehicleEF	OBUS	0.32	0.41

tblVehicleEF	OBUS	1.10	1.59
tblVehicleEF	OBUS	3.67	1.17
tblVehicleEF	OBUS	2.9000e-005	1.3400e-004
tblVehicleEF	OBUS	3.1040e-003	8.1250e-003
tblVehicleEF	OBUS	6.6000e-004	1.4000e-004
tblVehicleEF	OBUS	2.8000e-005	1.2900e-004
tblVehicleEF	OBUS	2.9580e-003	7.7640e-003
tblVehicleEF	OBUS	6.0600e-004	1.2900e-004
tblVehicleEF	OBUS	1.0980e-003	1.0910e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	6.0200e-004	5.6600e-004
tblVehicleEF	OBUS	0.05	0.03
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.30	0.08
tblVehicleEF	OBUS	1.3670e-003	9.5500e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.2400e-004	1.4100e-004
tblVehicleEF	OBUS	1.0980e-003	1.0910e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	6.0200e-004	5.6600e-004
tblVehicleEF	OBUS	0.06	0.03
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.33	0.09
tblVehicleEF	SBUS	0.81	0.16
tblVehicleEF	SBUS	9.8340e-003	3.3570e-003

tblVehicleEF	SBUS	0.06	0.01
tblVehicleEF	SBUS	8.09	5.87
tblVehicleEF	SBUS	0.59	0.28
tblVehicleEF	SBUS	7.19	1.80
tblVehicleEF	SBUS	1,103.84	390.07
tblVehicleEF	SBUS	1,057.81	932.50
tblVehicleEF	SBUS	57.01	11.79
tblVehicleEF	SBUS	9.4500e-004	1.0360e-003
tblVehicleEF	SBUS	7.90	2.10
tblVehicleEF	SBUS	3.38	1.47
tblVehicleEF	SBUS	11.83	1.21
tblVehicleEF	SBUS	7.0490e-003	1.4420e-003
tblVehicleEF	SBUS	0.01	9.6480e-003
tblVehicleEF	SBUS	0.02	9.6500e-003
tblVehicleEF	SBUS	6.8100e-004	1.4900e-004
tblVehicleEF	SBUS	6.7440e-003	1.3800e-003
tblVehicleEF	SBUS	2.6370e-003	2.4120e-003
tblVehicleEF	SBUS	0.02	9.2040e-003
tblVehicleEF	SBUS	6.2600e-004	1.3700e-004
tblVehicleEF	SBUS	2.7710e-003	1.1660e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	0.96	0.71
tblVehicleEF	SBUS	1.5500e-003	6.2300e-004
tblVehicleEF	SBUS	0.09	0.03
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.38	0.07
tblVehicleEF	SBUS	0.01	3.7520e-003

tblVehicleEF	SBUS	0.01	9.0210e-003
tblVehicleEF	SBUS	6.9400e-004	1.1700e-004
tblVehicleEF	SBUS	2.7710e-003	1.1660e-003
tblVehicleEF	SBUS	0.03	0.01
tblVehicleEF	SBUS	1.38	1.03
tblVehicleEF	SBUS	1.5500e-003	6.2300e-004
tblVehicleEF	SBUS	0.11	0.04
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.42	0.08
tblVehicleEF	UBUS	0.42	1.38
tblVehicleEF	UBUS	0.05	0.00
tblVehicleEF	UBUS	8.65	10.31
tblVehicleEF	UBUS	9.26	0.00
tblVehicleEF	UBUS	2,259.15	1,709.68
tblVehicleEF	UBUS	65.85	0.00
tblVehicleEF	UBUS	3.5530e-003	6.4740e-003
tblVehicleEF	UBUS	15.81	0.75
tblVehicleEF	UBUS	17.18	0.00
tblVehicleEF	UBUS	0.69	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.30	5.4620e-003
tblVehicleEF	UBUS	1.1580e-003	0.00
tblVehicleEF	UBUS	0.29	0.03
tblVehicleEF	UBUS	3.0000e-003	8.6540e-003
tblVehicleEF	UBUS	0.29	5.2260e-003
tblVehicleEF	UBUS	1.0650e-003	0.00
tblVehicleEF	UBUS	3.1800e-003	0.00

tblVehicleEF	UBUS	0.08	0.00
tblVehicleEF	UBUS	1.5890e-003	0.00
tblVehicleEF	UBUS	1.27	0.02
tblVehicleEF	UBUS	0.03	0.00
tblVehicleEF	UBUS	0.62	0.00
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	8.2300e-004	0.00
tblVehicleEF	UBUS	3.1800e-003	0.00
tblVehicleEF	UBUS	0.08	0.00
tblVehicleEF	UBUS	1.5890e-003	0.00
tblVehicleEF	UBUS	1.79	1.41
tblVehicleEF	UBUS	0.03	0.00
tblVehicleEF	UBUS	0.68	0.00
tblVehicleTrips	ST_TR	6.39	1.77
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	5.67	1.77
tblVehicleTrips	ST_TR	42.04	38.00
tblVehicleTrips	ST_TR	0.00	27.15
tblVehicleTrips	SU_TR	5.86	1.77
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	4.84	1.77
tblVehicleTrips	SU_TR	20.43	38.00
tblVehicleTrips	SU_TR	0.00	27.15
tblVehicleTrips	WD_TR	6.65	1.77
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	5.81	1.77
tblVehicleTrips	WD_TR	44.32	38.00

tblVehicleTrips	WD_TR	0.00	27.15
tblWoodstoves	NumberCatalytic	15.00	0.00
tblWoodstoves	NumberNoncatalytic	15.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021											0.0000	52.6306	52.6306	0.0144	0.0000	52.9903
Maximum											**0.0000**	**52.6306**	**52.6306**	**0.0144**	**0.0000**	**52.9903**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021											0.0000	52.6305	52.6305	0.0144	0.0000	52.9902
Maximum											**0.0000**	**52.6305**	**52.6305**	**0.0144**	**0.0000**	**52.9902**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											1.5597	22.8052	24.3649	0.0175	2.3000e-004	24.8694
Energy											0.0000	455.9568	455.9568	0.0746	0.0220	464.3721
Mobile											0.0000	1,081.4609	1,081.4609	0.0401	0.0000	1,082.4626
Stationary											0.0000	22.9621	22.9621	3.2200e-003	0.0000	23.0426
Waste											81.0381	0.0000	81.0381	4.7892	0.0000	200.7683
Water											17.7461	0.0000	17.7461	1.8285	0.0442	76.6432
Total											**100.3438**	**1,583.1850**	**1,683.5288**	**6.7530**	**0.0665**	**1,872.1583**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											1.5597	22.8052	24.3649	0.0175	2.3000e-004	24.8694
Energy											0.0000	455.9568	455.9568	0.0746	0.0220	464.3721
Mobile											0.0000	1,081.4609	1,081.4609	0.0401	0.0000	1,082.4626
Stationary											0.0000	22.9621	22.9621	3.2200e-003	0.0000	23.0426
Waste											81.0381	0.0000	81.0381	4.7892	0.0000	200.7683
Water											17.7461	0.0000	17.7461	1.8285	0.0442	76.6432
Total											**100.3438**	**1,583.1850**	**1,683.5288**	**6.7530**	**0.0665**	**1,872.1583**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	2/11/2021	5	30	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 5.85

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total											**0.0000**	**51.0012**	**51.0012**	**0.0144**	**0.0000**	**51.3601**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.6294	1.6294	3.0000e-005	0.0000	1.6302
Total											**0.0000**	**1.6294**	**1.6294**	**3.0000e-005**	**0.0000**	**1.6302**

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total											**0.0000**	**51.0011**	**51.0011**	**0.0144**	**0.0000**	**51.3600**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	1.6294	1.6294	3.0000e-005	0.0000	1.6302
Total											**0.0000**	**1.6294**	**1.6294**	**3.0000e-005**	**0.0000**	**1.6302**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	1,081.4609	1,081.4609	0.0401	0.0000	1,082.4626
Unmitigated											0.0000	1,081.4609	1,081.4609	0.0401	0.0000	1,082.4626

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,327.50	1,327.50	1327.50	3,066,004	3,066,004
City Park	0.00	0.00	0.00		
Condo/Townhouse	177.00	177.00	177.00	408,800	408,800
Enclosed Parking with Elevator	0.00	0.00	0.00		
Strip Mall	285.00	285.00	285.00	438,909	438,909
User Defined Parking	0.00	0.00	0.00		
Total	1,789.50	1,789.50	1,789.50	3,913,714	3,913,714

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Condo/Townhouse	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
User Defined Parking	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
City Park	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Condo/Townhouse	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Enclosed Parking with Elevator	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Strip Mall	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
User Defined Parking	0.179362	0.016959	0.053679	0.420000	0.000000	0.090000	0.190000	0.050000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Balboa Reservoir, Operational: Variant Option - Phase 1 - San Francisco County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	0.0000	0.0000	0.0659	0.0136	5.7058
Electricity Unmitigated											0.0000	0.0000	0.0000	0.0659	0.0136	5.7058
NaturalGas Mitigated											0.0000	455.9568	455.9568	8.7400e-003	8.3600e-003	458.6663
NaturalGas Unmitigated											0.0000	455.9568	455.9568	8.7400e-003	8.3600e-003	458.6663

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	6.33195e+006											0.0000	337.8968	337.8968	6.4800e-003	6.1900e-003	339.9047
City Park	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	2.17741e+006											0.0000	116.1950	116.1950	2.2300e-003	2.1300e-003	116.8854
Enclosed Parking with Elevator	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	34950											0.0000	1.8651	1.8651	4.0000e-005	3.0000e-005	1.8762
User Defined Parking	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**455.9568**	**455.9568**	**8.7500e-003**	**8.3500e-003**	**458.6663**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	6.33195e+006											0.0000	337.8968	337.8968	6.4800e-003	6.1900e-003	339.9047
City Park	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	2.17741e+006											0.0000	116.1950	116.1950	2.2300e-003	2.1300e-003	116.8854
Enclosed Parking with Elevator	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	34950											0.0000	1.8651	1.8651	4.0000e-005	3.0000e-005	1.8762
User Defined Parking	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**455.9568**	**455.9568**	**8.7500e-003**	**8.3500e-003**	**458.6663**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	3.0789e+006	0.0000	0.0405	8.3800e-003	3.5096
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	488007	0.0000	6.4200e-003	1.3300e-003	0.5563
Enclosed Parking with Elevator	1.36586e+006	0.0000	0.0180	3.7200e-003	1.5569
Strip Mall	72886.2	0.0000	9.6000e-004	2.0000e-004	0.0831
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0659**	**0.0136**	**5.7058**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	3.0789e+006	0.0000	0.0405	8.3800e-003	3.5096
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	488007	0.0000	6.4200e-003	1.3300e-003	0.5563
Enclosed Parking with Elevator	1.36586e+006	0.0000	0.0180	3.7200e-003	1.5569
Strip Mall	72886.2	0.0000	9.6000e-004	2.0000e-004	0.0831
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0659**	**0.0136**	**5.7058**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											1.5597	22.8052	24.3649	0.0175	2.3000e-004	24.8694
Unmitigated											1.5597	22.8052	24.3649	0.0175	2.3000e-004	24.8694

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											1.5597	12.4839	14.0436	7.5300e-003	2.3000e-004	14.3001
Landscaping											0.0000	10.3213	10.3213	9.9200e-003	0.0000	10.5694
Total											**1.5597**	**22.8052**	**24.3649**	**0.0175**	**2.3000e-004**	**24.8694**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											1.5597	12.4839	14.0436	7.5300e-003	2.3000e-004	14.3001
Landscaping											0.0000	10.3213	10.3213	9.9200e-003	0.0000	10.5694
Total											**1.5597**	**22.8052**	**24.3649**	**0.0175**	**2.3000e-004**	**24.8694**

7.0 Water Detail

7.1 Mitigation Measures Water

Balboa Reservoir, Operational: Variant Option - Phase 1 - San Francisco County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	17.7461	1.8285	0.0442	76.6432
Unmitigated	17.7461	1.8285	0.0442	76.6432

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	48.8655 / 30.8065	15.5028	1.5972	0.0386	66.9382
City Park	0 / 4.76593	0.0000	2.2000e-004	5.0000e-005	0.0190
Condo/Townhouse	6.5154 / 4.10754	2.0670	0.2130	5.1500e-003	8.9251
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.555544 / 0.340495	0.1763	0.0182	4.4000e-004	0.7610
User Defined Parking	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**17.7461**	**1.8285**	**0.0443**	**76.6432**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	48.8655 / 30.8065	15.5028	1.5972	0.0386	66.9382
City Park	0 / 4.76593	0.0000	2.2000e-004	5.0000e-005	0.0190
Condo/Townhouse	6.5154 / 4.10754	2.0670	0.2130	5.1500e-003	8.9251
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.555544 / 0.340495	0.1763	0.0182	4.4000e-004	0.7610
User Defined Parking	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**17.7461**	**1.8285**	**0.0443**	**76.6432**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	81.0381	4.7892	0.0000	200.7683
Unmitigated	81.0381	4.7892	0.0000	200.7683

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	345	70.0319	4.1388	0.0000	173.5010
City Park	0.34	0.0690	4.0800e-003	0.0000	0.1710
Condo/Townhouse	46	9.3376	0.5518	0.0000	23.1335
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	7.88	1.5996	0.0945	0.0000	3.9629
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**81.0381**	**4.7892**	**0.0000**	**200.7683**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	345	70.0319	4.1388	0.0000	173.5010
City Park	0.34	0.0690	4.0800e-003	0.0000	0.1710
Condo/Townhouse	46	9.3376	0.5518	0.0000	23.1335
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	7.88	1.5996	0.0945	0.0000	3.9629
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**81.0381**	**4.7892**	**0.0000**	**200.7683**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	3	2	50	402	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (300 - 600 HP)											0.0000	22.9621	22.9621	3.2200e-003	0.0000	23.0426
Total											**0.0000**	**22.9621**	**22.9621**	**3.2200e-003**	**0.0000**	**23.0426**

11.0 Vegetation

Balboa Reservoir, Operational: Variant Option - Phase 2

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	10.00	1000sqft	0.23	10,000.00	0
Enclosed Parking with Elevator	0.00	Space	0.00	0.00	0
User Defined Parking	1.00	User Defined Unit	0.00	0.00	0
Apartments Mid Rise	700.00	Dwelling Unit	18.42	154,700.00	2002

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2027
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	258	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Balboa Reservoir, Operational: Variant Option - Phase 2 - San Francisco County, Annual

Project Characteristics - CO2 Intensity Factor is adjusted to account for RPS decreases.

Land Use - Residential square footage scaled based on total residential gross ksf, consistent with the Project description.

Construction Phase - Construction is evaluated separately.

Off-road Equipment -

Vehicle Trips - Operational trips based on May 14, 2019 Kittelson & Assoc traffic analysis.

Vehicle Emission Factors - Mobile emission factors updated based on EMFAC2017.

Vehicle Emission Factors - EMFAC 2017 for 2027

Vehicle Emission Factors - EMFAC 2017 for 2027

Woodstoves - Assumed no apartment fireplaces, per Project Sponsor.

Energy Use - For Apartments and Condos: Assumed 10% electricity and lighting energy reduction, and 4.7% natural gas energy reduction consistent with 2019 Title 24. For all other landuses, assumed 10.7% electricity and lighting energy reduction, and 1% natural gas ener

Water And Wastewater -

Solid Waste -

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	0	4584
tblAreaCoating	Area_Residential_Exterior	104423	358425
tblAreaCoating	Area_Residential_Interior	313268	1075275
tblEnergyUse	LightingElect	741.44	667.30
tblEnergyUse	LightingElect	2.58	2.24
tblEnergyUse	LightingElect	2.63	1.56
tblEnergyUse	NT24E	3,277.06	3,054.10
tblEnergyUse	T24E	502.89	383.81
tblEnergyUse	T24E	0.69	0.59
tblEnergyUse	T24E	3.92	3.50
tblEnergyUse	T24NG	8,824.58	5,827.60
tblEnergyUse	T24NG	14.93	14.85

tblFireplaces	NumberGas	105.00	0.00
tblFireplaces	NumberNoFireplace	28.00	700.00
tblFireplaces	NumberWood	119.00	0.00
tblFleetMix	FleetMixLandUseSubType	Day-Care Center	Apartments Mid Rise
tblFleetMix	FleetMixLandUseSubType	Enclosed Parking with Elevator	Day-Care Center
tblFleetMix	FleetMixLandUseSubType	User Defined Parking	Enclosed Parking with Elevator
tblFleetMix	FleetMixLandUseSubType	Apartments Mid Rise	User Defined Parking
tblFleetMix	HHD	9.4710e-003	0.00
tblFleetMix	HHD	9.4710e-003	0.00
tblFleetMix	HHD	9.4710e-003	0.00
tblFleetMix	HHD	9.4710e-003	0.05
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.18
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.02
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.05
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00

tblFleetMix	LHD2	5.1840e-003	0.00
tblFleetMix	LHD2	5.1840e-003	0.00
tblFleetMix	LHD2	5.1840e-003	0.00
tblFleetMix	LHD2	5.1840e-003	0.09
tblFleetMix	MCY	5.9520e-003	0.00
tblFleetMix	MCY	5.9520e-003	0.00
tblFleetMix	MCY	5.9520e-003	0.00
tblFleetMix	MCY	5.9520e-003	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.42
tblFleetMix	MH	5.6100e-004	0.00
tblFleetMix	MH	5.6100e-004	0.00
tblFleetMix	MH	5.6100e-004	0.00
tblFleetMix	MH	5.6100e-004	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.19
tblFleetMix	OBUS	4.2720e-003	0.00
tblFleetMix	OBUS	4.2720e-003	0.00
tblFleetMix	OBUS	4.2720e-003	0.00
tblFleetMix	OBUS	4.2720e-003	0.00
tblFleetMix	SBUS	9.5600e-004	0.00
tblFleetMix	SBUS	9.5600e-004	0.00
tblFleetMix	SBUS	9.5600e-004	0.00

tblFleetMix	SBUS	9.5600e-004	0.00
tblFleetMix	UBUS	2.9830e-003	0.00
tblFleetMix	UBUS	2.9830e-003	0.00
tblFleetMix	UBUS	2.9830e-003	0.00
tblFleetMix	UBUS	2.9830e-003	0.00
tblLandUse	BuildingSpaceSquareFeet	700,000.00	154,700.00
tblLandUse	LandUseSquareFeet	700,000.00	154,700.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	258
tblProjectCharacteristics	OperationalYear	2018	2027
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	402.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	2.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblTripsAndVMT	WorkerTripNumber	15.00	3.00
tblVehicleEF	HHD	0.44	0.05
tblVehicleEF	HHD	0.40	0.35
tblVehicleEF	HHD	0.06	1.0000e-006
tblVehicleEF	HHD	1.53	4.91
tblVehicleEF	HHD	2.41	1.39
tblVehicleEF	HHD	5.25	0.01
tblVehicleEF	HHD	3,003.30	944.78
tblVehicleEF	HHD	1,824.55	1,827.00
tblVehicleEF	HHD	16.29	0.11
tblVehicleEF	HHD	9.4710e-003	8.5740e-003
tblVehicleEF	HHD	15.10	5.87
tblVehicleEF	HHD	2.58	3.67
tblVehicleEF	HHD	18.65	2.33

tblVehicleEF	HHD	0.02	5.9640e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	7.5960e-003	0.02
tblVehicleEF	HHD	1.7400e-004	2.0000e-006
tblVehicleEF	HHD	0.02	5.7060e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.5310e-003	8.7170e-003
tblVehicleEF	HHD	7.2670e-003	0.02
tblVehicleEF	HHD	1.6000e-004	2.0000e-006
tblVehicleEF	HHD	9.4000e-005	6.0000e-006
tblVehicleEF	HHD	4.7710e-003	3.5600e-004
tblVehicleEF	HHD	0.34	0.33
tblVehicleEF	HHD	6.9000e-005	4.0000e-006
tblVehicleEF	HHD	0.09	0.04
tblVehicleEF	HHD	7.8500e-004	2.4900e-004
tblVehicleEF	HHD	0.09	6.0000e-006
tblVehicleEF	HHD	0.02	7.9910e-003
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	2.4800e-004	1.0000e-006
tblVehicleEF	HHD	9.4000e-005	6.0000e-006
tblVehicleEF	HHD	4.7710e-003	3.5600e-004
tblVehicleEF	HHD	0.42	0.40
tblVehicleEF	HHD	6.9000e-005	4.0000e-006
tblVehicleEF	HHD	0.50	0.40
tblVehicleEF	HHD	7.8500e-004	2.4900e-004
tblVehicleEF	HHD	0.10	6.0000e-006

tblVehicleEF	HHD	0.42	0.53
tblVehicleEF	HHD	0.40	0.38
tblVehicleEF	HHD	0.05	0.06
tblVehicleEF	HHD	1.11	1.27
tblVehicleEF	HHD	2.43	2.23
tblVehicleEF	HHD	4.80	4.12
tblVehicleEF	HHD	3,181.73	3,320.71
tblVehicleEF	HHD	1,824.55	1,887.93
tblVehicleEF	HHD	16.29	14.15
tblVehicleEF	HHD	15.59	18.25
tblVehicleEF	HHD	2.47	2.89
tblVehicleEF	HHD	18.62	18.96
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	7.5960e-003	8.4530e-003
tblVehicleEF	HHD	1.7400e-004	1.4500e-004
tblVehicleEF	HHD	0.01	0.02
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	7.2670e-003	8.0860e-003
tblVehicleEF	HHD	1.6000e-004	1.3300e-004
tblVehicleEF	HHD	1.8800e-004	1.6600e-004
tblVehicleEF	HHD	5.0510e-003	4.3660e-003
tblVehicleEF	HHD	0.32	0.36
tblVehicleEF	HHD	1.4100e-004	1.2200e-004
tblVehicleEF	HHD	0.09	0.10
tblVehicleEF	HHD	7.4300e-004	6.3700e-004

tblVehicleEF	HHD	0.09	0.09
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.01	0.02
tblVehicleEF	HHD	2.4100e-004	2.0900e-004
tblVehicleEF	HHD	1.8800e-004	1.6600e-004
tblVehicleEF	HHD	5.0510e-003	4.3660e-003
tblVehicleEF	HHD	0.40	0.45
tblVehicleEF	HHD	1.4100e-004	1.2200e-004
tblVehicleEF	HHD	0.50	0.48
tblVehicleEF	HHD	7.4300e-004	6.3700e-004
tblVehicleEF	HHD	0.10	0.09
tblVehicleEF	HHD	0.48	0.60
tblVehicleEF	HHD	0.40	0.38
tblVehicleEF	HHD	0.06	0.07
tblVehicleEF	HHD	2.11	2.40
tblVehicleEF	HHD	2.39	2.20
tblVehicleEF	HHD	5.55	4.77
tblVehicleEF	HHD	2,756.90	2,877.32
tblVehicleEF	HHD	1,824.55	1,887.93
tblVehicleEF	HHD	16.29	14.15
tblVehicleEF	HHD	14.43	16.89
tblVehicleEF	HHD	2.62	3.07
tblVehicleEF	HHD	18.66	19.00
tblVehicleEF	HHD	0.02	0.03
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	7.5960e-003	8.4530e-003

tblVehicleEF	HHD	1.7400e-004	1.4500e-004
tblVehicleEF	HHD	0.02	0.03
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	7.2670e-003	8.0860e-003
tblVehicleEF	HHD	1.6000e-004	1.3300e-004
tblVehicleEF	HHD	6.2000e-005	4.9000e-005
tblVehicleEF	HHD	4.9960e-003	4.3680e-003
tblVehicleEF	HHD	0.36	0.42
tblVehicleEF	HHD	3.5000e-005	2.7000e-005
tblVehicleEF	HHD	0.09	0.10
tblVehicleEF	HHD	8.8800e-004	7.5200e-004
tblVehicleEF	HHD	0.10	0.10
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	0.01	0.02
tblVehicleEF	HHD	2.5300e-004	2.1900e-004
tblVehicleEF	HHD	6.2000e-005	4.9000e-005
tblVehicleEF	HHD	4.9960e-003	4.3680e-003
tblVehicleEF	HHD	0.46	0.52
tblVehicleEF	HHD	3.5000e-005	2.7000e-005
tblVehicleEF	HHD	0.50	0.48
tblVehicleEF	HHD	8.8800e-004	7.5200e-004
tblVehicleEF	HHD	8.8800e-004	7.5200e-004
tblVehicleEF	HHD	0.11	0.11
tblVehicleEF	HHD	0.11	0.11
tblVehicleEF	LDA	2.8300e-003	2.0270e-003
tblVehicleEF	LDA	3.0060e-003	0.04
tblVehicleEF	LDA	0.41	0.56

tblVehicleEF	LDA	0.80	2.13
tblVehicleEF	LDA	219.95	249.41
tblVehicleEF	LDA	46.71	49.94
tblVehicleEF	LDA	0.60	0.58
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.04	0.17
tblVehicleEF	LDA	1.8790e-003	1.7070e-003
tblVehicleEF	LDA	2.1490e-003	1.7140e-003
tblVehicleEF	LDA	1.7300e-003	1.5720e-003
tblVehicleEF	LDA	1.9760e-003	1.5760e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	7.1430e-003	7.6970e-003
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	2.2010e-003	2.4670e-003
tblVehicleEF	LDA	4.8000e-004	4.9400e-004
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.04	0.22
tblVehicleEF	LDA	3.0910e-003	3.9780e-003
tblVehicleEF	LDA	2.5210e-003	3.5580e-003
tblVehicleEF	LDA	0.47	0.56

tblVehicleEF	LDA	0.63	0.79
tblVehicleEF	LDA	233.90	264.63
tblVehicleEF	LDA	46.71	52.61
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	1.8790e-003	2.0930e-003
tblVehicleEF	LDA	2.1490e-003	2.2530e-003
tblVehicleEF	LDA	1.7300e-003	1.9270e-003
tblVehicleEF	LDA	1.9760e-003	2.0710e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	7.7880e-003	0.01
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	2.3410e-003	2.6490e-003
tblVehicleEF	LDA	4.7700e-004	5.3900e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	2.7870e-003	3.5900e-003
tblVehicleEF	LDA	3.3000e-003	4.6640e-003
tblVehicleEF	LDA	0.41	0.49
tblVehicleEF	LDA	0.90	1.14

tblVehicleEF	LDA	219.46	248.27
tblVehicleEF	LDA	46.71	52.61
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	1.8790e-003	2.0930e-003
tblVehicleEF	LDA	2.1490e-003	2.2530e-003
tblVehicleEF	LDA	1.7300e-003	1.9270e-003
tblVehicleEF	LDA	1.9760e-003	2.0710e-003
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	7.0370e-003	9.0760e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	2.1960e-003	2.4850e-003
tblVehicleEF	LDA	4.8200e-004	5.4500e-004
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDT1	4.4890e-003	3.3460e-003
tblVehicleEF	LDT1	5.7740e-003	0.05
tblVehicleEF	LDT1	0.59	0.77

tblVehicleEF	LDT1	1.36	2.29
tblVehicleEF	LDT1	278.99	301.05
tblVehicleEF	LDT1	60.02	60.36
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.07	0.21
tblVehicleEF	LDT1	2.1360e-003	1.9580e-003
tblVehicleEF	LDT1	2.4390e-003	1.9990e-003
tblVehicleEF	LDT1	1.9650e-003	1.8020e-003
tblVehicleEF	LDT1	2.2430e-003	1.8380e-003
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.01	0.01
tblVehicleEF	LDT1	0.11	0.07
tblVehicleEF	LDT1	0.08	0.25
tblVehicleEF	LDT1	2.7950e-003	2.9790e-003
tblVehicleEF	LDT1	6.2300e-004	5.9700e-004
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.11	0.07
tblVehicleEF	LDT1	0.09	0.28
tblVehicleEF	LDT1	4.8820e-003	6.5020e-003
tblVehicleEF	LDT1	4.8220e-003	6.8970e-003
tblVehicleEF	LDT1	0.67	0.84

tblVehicleEF	LDT1	1.07	1.42
tblVehicleEF	LDT1	296.24	329.94
tblVehicleEF	LDT1	60.02	66.21
tblVehicleEF	LDT1	0.04	0.06
tblVehicleEF	LDT1	0.06	0.09
tblVehicleEF	LDT1	2.1360e-003	2.3520e-003
tblVehicleEF	LDT1	2.4390e-003	2.5880e-003
tblVehicleEF	LDT1	1.9650e-003	2.1640e-003
tblVehicleEF	LDT1	2.2430e-003	2.3800e-003
tblVehicleEF	LDT1	0.09	0.11
tblVehicleEF	LDT1	0.14	0.17
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.01	0.02
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.07	0.09
tblVehicleEF	LDT1	2.9680e-003	3.3070e-003
tblVehicleEF	LDT1	6.1800e-004	6.8600e-004
tblVehicleEF	LDT1	0.09	0.11
tblVehicleEF	LDT1	0.14	0.17
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.07	0.10
tblVehicleEF	LDT1	4.4250e-003	5.9110e-003
tblVehicleEF	LDT1	6.3510e-003	9.1220e-003
tblVehicleEF	LDT1	0.59	0.74
tblVehicleEF	LDT1	1.54	2.05

tblVehicleEF	LDT1	278.39	310.08
tblVehicleEF	LDT1	60.02	66.21
tblVehicleEF	LDT1	0.05	0.07
tblVehicleEF	LDT1	0.08	0.11
tblVehicleEF	LDT1	2.1360e-003	2.3520e-003
tblVehicleEF	LDT1	2.4390e-003	2.5880e-003
tblVehicleEF	LDT1	1.9650e-003	2.1640e-003
tblVehicleEF	LDT1	2.2430e-003	2.3800e-003
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.14	0.17
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.01	0.01
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.09	0.12
tblVehicleEF	LDT1	2.7880e-003	3.1070e-003
tblVehicleEF	LDT1	6.2600e-004	6.9700e-004
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.14	0.17
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.09	0.13
tblVehicleEF	LDT1	0.09	0.13
tblVehicleEF	LDT2	4.0670e-003	3.0070e-003
tblVehicleEF	LDT2	3.8900e-003	0.06
tblVehicleEF	LDT2	0.56	0.71

tblVehicleEF	LDT2	1.01	2.68
tblVehicleEF	LDT2	315.12	318.38
tblVehicleEF	LDT2	66.58	64.11
tblVehicleEF	LDT2	0.19	0.17
tblVehicleEF	LDT2	0.04	0.05
tblVehicleEF	LDT2	0.06	0.23
tblVehicleEF	LDT2	2.0530e-003	1.7430e-003
tblVehicleEF	LDT2	2.3100e-003	1.6970e-003
tblVehicleEF	LDT2	1.8880e-003	1.6040e-003
tblVehicleEF	LDT2	2.1240e-003	1.5600e-003
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.07	0.10
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.05	0.27
tblVehicleEF	LDT2	3.1540e-003	3.1490e-003
tblVehicleEF	LDT2	6.8200e-004	6.3400e-004
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.07	0.10
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.06	0.29
tblVehicleEF	LDT2	4.4360e-003	5.4610e-003
tblVehicleEF	LDT2	3.2750e-003	4.3540e-003
tblVehicleEF	LDT2	0.63	0.72

tblVehicleEF	LDT2	0.81	0.97
tblVehicleEF	LDT2	334.70	371.94
tblVehicleEF	LDT2	66.58	73.70
tblVehicleEF	LDT2	0.04	0.05
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	2.0530e-003	2.1760e-003
tblVehicleEF	LDT2	2.3100e-003	2.3270e-003
tblVehicleEF	LDT2	1.8880e-003	2.0010e-003
tblVehicleEF	LDT2	2.1240e-003	2.1400e-003
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	3.3510e-003	3.7240e-003
tblVehicleEF	LDT2	6.7900e-004	7.5300e-004
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	4.0060e-003	4.9320e-003
tblVehicleEF	LDT2	4.2630e-003	5.7010e-003
tblVehicleEF	LDT2	0.56	0.64
tblVehicleEF	LDT2	1.14	1.38

tblVehicleEF	LDT2	314.44	349.38
tblVehicleEF	LDT2	66.58	73.70
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	2.0530e-003	2.1760e-003
tblVehicleEF	LDT2	2.3100e-003	2.3270e-003
tblVehicleEF	LDT2	1.8880e-003	2.0010e-003
tblVehicleEF	LDT2	2.1240e-003	2.1400e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	9.9620e-003	0.01
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	3.1480e-003	3.4980e-003
tblVehicleEF	LDT2	6.8400e-004	7.6000e-004
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LHD1	4.9030e-003	5.7060e-003
tblVehicleEF	LHD1	9.7570e-003	6.6600e-003
tblVehicleEF	LHD1	0.01	0.01

tblVehicleEF	LHD1	0.15	0.20
tblVehicleEF	LHD1	0.63	0.58
tblVehicleEF	LHD1	1.95	1.10
tblVehicleEF	LHD1	8.79	8.63
tblVehicleEF	LHD1	666.50	806.60
tblVehicleEF	LHD1	32.01	12.89
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.45	0.34
tblVehicleEF	LHD1	0.87	0.33
tblVehicleEF	LHD1	7.1700e-004	6.8000e-004
tblVehicleEF	LHD1	0.01	9.5380e-003
tblVehicleEF	LHD1	9.2180e-003	6.6230e-003
tblVehicleEF	LHD1	7.0000e-004	2.4000e-004
tblVehicleEF	LHD1	6.8600e-004	6.5100e-004
tblVehicleEF	LHD1	2.5410e-003	2.3840e-003
tblVehicleEF	LHD1	8.7840e-003	6.2890e-003
tblVehicleEF	LHD1	6.4400e-004	2.2100e-004
tblVehicleEF	LHD1	1.6780e-003	1.4240e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.1380e-003	9.2100e-004
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.27	0.16
tblVehicleEF	LHD1	0.19	0.07
tblVehicleEF	LHD1	8.8000e-005	8.4000e-005
tblVehicleEF	LHD1	6.5320e-003	7.8940e-003

tblVehicleEF	LHD1	3.5600e-004	1.2800e-004
tblVehicleEF	LHD1	1.6780e-003	1.4240e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.1380e-003	9.2100e-004
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.27	0.16
tblVehicleEF	LHD1	0.20	0.07
tblVehicleEF	LHD1	4.9030e-003	5.6310e-003
tblVehicleEF	LHD1	9.9900e-003	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.15	0.15
tblVehicleEF	LHD1	0.64	0.77
tblVehicleEF	LHD1	1.81	2.15
tblVehicleEF	LHD1	8.79	8.76
tblVehicleEF	LHD1	666.50	690.52
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tblVehicleEF	LHD1	0.43	0.57
tblVehicleEF	LHD1	0.80	0.95
tblVehicleEF	LHD1	7.1700e-004	7.0900e-004
tblVehicleEF	LHD1	0.01	9.9640e-003
tblVehicleEF	LHD1	9.2180e-003	9.9640e-003
tblVehicleEF	LHD1	7.0000e-004	8.1300e-004
tblVehicleEF	LHD1	6.8600e-004	6.7800e-004
tblVehicleEF	LHD1	2.5410e-003	2.4910e-003
tblVehicleEF	LHD1	8.7840e-003	9.4940e-003

tblVehicleEF	LHD1	6.4400e-004	7.4800e-004
tblVehicleEF	LHD1	3.2740e-003	3.7230e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.2070e-003	2.4410e-003
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	0.25	0.27
tblVehicleEF	LHD1	0.17	0.22
tblVehicleEF	LHD1	6.5330e-003	6.7850e-003
tblVehicleEF	LHD1	3.5400e-004	3.9200e-004
tblVehicleEF	LHD1	3.2740e-003	3.7230e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.2070e-003	2.4410e-003
tblVehicleEF	LHD1	0.11	0.12
tblVehicleEF	LHD1	0.25	0.27
tblVehicleEF	LHD1	0.19	0.24
tblVehicleEF	LHD1	4.9030e-003	5.6310e-003
tblVehicleEF	LHD1	9.6270e-003	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.15	0.15
tblVehicleEF	LHD1	0.63	0.74
tblVehicleEF	LHD1	2.06	2.46
tblVehicleEF	LHD1	8.79	8.76
tblVehicleEF	LHD1	666.50	690.52
tblVehicleEF	LHD1	32.01	35.12
tblVehicleEF	LHD1	0.06	0.06

tblVehicleEF	LHD1	0.46	0.62
tblVehicleEF	LHD1	0.91	1.08
tblVehicleEF	LHD1	7.1700e-004	7.0900e-004
tblVehicleEF	LHD1	0.01	9.9640e-003
tblVehicleEF	LHD1	9.2180e-003	9.9640e-003
tblVehicleEF	LHD1	7.0000e-004	8.1300e-004
tblVehicleEF	LHD1	6.8600e-004	6.7800e-004
tblVehicleEF	LHD1	2.5410e-003	2.4910e-003
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tblVehicleEF	LHD1	6.4400e-004	7.4800e-004
tblVehicleEF	LHD1	1.0810e-003	1.1850e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	5.8600e-004	6.2900e-004
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	0.29	0.31
tblVehicleEF	LHD1	0.19	0.24
tblVehicleEF	LHD1	6.5320e-003	6.7840e-003
tblVehicleEF	LHD1	3.5800e-004	3.9700e-004
tblVehicleEF	LHD1	1.0810e-003	1.1850e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	5.8600e-004	6.2900e-004
tblVehicleEF	LHD1	0.11	0.11
tblVehicleEF	LHD1	0.29	0.31
tblVehicleEF	LHD1	0.29	0.31
tblVehicleEF	LHD1	0.21	0.27

tblVehicleEF	LHD1	0.21	0.27
tblVehicleEF	LHD2	2.8130e-003	3.3650e-003
tblVehicleEF	LHD2	5.7530e-003	6.0180e-003
tblVehicleEF	LHD2	4.0620e-003	7.6680e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.47	0.52
tblVehicleEF	LHD2	0.97	0.65
tblVehicleEF	LHD2	13.71	13.47
tblVehicleEF	LHD2	684.83	765.11
tblVehicleEF	LHD2	22.72	8.40
tblVehicleEF	LHD2	5.1840e-003	5.5390e-003
tblVehicleEF	LHD2	0.08	0.08
tblVehicleEF	LHD2	0.28	0.47
tblVehicleEF	LHD2	0.32	0.19
tblVehicleEF	LHD2	1.1150e-003	1.3540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7400e-004	1.2600e-004
tblVehicleEF	LHD2	1.0660e-003	1.2960e-003
tblVehicleEF	LHD2	2.7020e-003	2.6650e-003
tblVehicleEF	LHD2	9.6070e-003	0.01
tblVehicleEF	LHD2	3.4400e-004	1.1600e-004
tblVehicleEF	LHD2	4.7800e-004	8.0100e-004
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.3100e-004	5.0800e-004
tblVehicleEF	LHD2	0.09	0.10

tblVehicleEF	LHD2	0.05	0.09
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	1.3400e-004	1.2900e-004
tblVehicleEF	LHD2	6.6560e-003	7.3990e-003
tblVehicleEF	LHD2	2.4400e-004	8.3000e-005
tblVehicleEF	LHD2	4.7800e-004	8.0100e-004
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	3.3100e-004	5.0800e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.05	0.09
tblVehicleEF	LHD2	0.06	0.04
tblVehicleEF	LHD2	2.8130e-003	3.2090e-003
tblVehicleEF	LHD2	5.8110e-003	6.8030e-003
tblVehicleEF	LHD2	3.8740e-003	5.3080e-003
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tblVehicleEF	LHD2	0.47	0.51
tblVehicleEF	LHD2	0.90	1.03
tblVehicleEF	LHD2	13.71	13.84
tblVehicleEF	LHD2	684.83	698.44
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tblVehicleEF	LHD2	0.08	0.09
tblVehicleEF	LHD2	0.27	0.42
tblVehicleEF	LHD2	0.30	0.38
tblVehicleEF	LHD2	1.1150e-003	1.1970e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01

tblVehicleEF	LHD2	3.7400e-004	3.9100e-004
tblVehicleEF	LHD2	1.0660e-003	1.1450e-003
tblVehicleEF	LHD2	2.7020e-003	2.6920e-003
tblVehicleEF	LHD2	9.6070e-003	0.01
tblVehicleEF	LHD2	3.4400e-004	3.5900e-004
tblVehicleEF	LHD2	9.4400e-004	1.1730e-003
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	6.5500e-004	7.7100e-004
tblVehicleEF	LHD2	0.09	0.10
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.05	0.07
tblVehicleEF	LHD2	1.3400e-004	1.3500e-004
tblVehicleEF	LHD2	6.6560e-003	6.7910e-003
tblVehicleEF	LHD2	2.4300e-004	2.5700e-004
tblVehicleEF	LHD2	9.4400e-004	1.1730e-003
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.5500e-004	7.7100e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.06	0.08
tblVehicleEF	LHD2	2.8130e-003	3.2090e-003
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tblVehicleEF	LHD2	4.1800e-003	5.8010e-003
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tblVehicleEF	LHD2	0.46	0.50

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tblVehicleEF	LHD2	684.83	698.44
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tblVehicleEF	LHD2	0.08	0.09
tblVehicleEF	LHD2	0.29	0.45
tblVehicleEF	LHD2	0.33	0.42
tblVehicleEF	LHD2	1.1150e-003	1.1970e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7400e-004	3.9100e-004
tblVehicleEF	LHD2	1.0660e-003	1.1450e-003
tblVehicleEF	LHD2	2.7020e-003	2.6920e-003
tblVehicleEF	LHD2	9.6070e-003	0.01
tblVehicleEF	LHD2	3.4400e-004	3.5900e-004
tblVehicleEF	LHD2	3.0900e-004	3.6600e-004
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	1.6900e-004	1.9400e-004
tblVehicleEF	LHD2	0.09	0.10
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.06	0.08
tblVehicleEF	LHD2	1.3400e-004	1.3500e-004
tblVehicleEF	LHD2	6.6560e-003	6.7910e-003
tblVehicleEF	LHD2	2.4500e-004	2.6000e-004
tblVehicleEF	LHD2	3.0900e-004	3.6600e-004
tblVehicleEF	LHD2	0.02	0.03

tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.6900e-004	1.9400e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.06	0.07
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tblVehicleEF	LHD2	0.06	0.09
tblVehicleEF	LHD2	0.06	0.09
tblVehicleEF	MCY	0.57	0.40
tblVehicleEF	MCY	0.16	0.25
tblVehicleEF	MCY	19.84	20.63
tblVehicleEF	MCY	10.27	9.07
tblVehicleEF	MCY	194.23	229.85
tblVehicleEF	MCY	44.84	61.66
tblVehicleEF	MCY	5.9520e-003	7.1020e-003
tblVehicleEF	MCY	1.18	1.19
tblVehicleEF	MCY	0.32	0.28
tblVehicleEF	MCY	2.6190e-003	2.3850e-003
tblVehicleEF	MCY	3.5290e-003	2.9930e-003
tblVehicleEF	MCY	2.4450e-003	2.2300e-003
tblVehicleEF	MCY	3.3180e-003	2.8200e-003
tblVehicleEF	MCY	0.77	0.79
tblVehicleEF	MCY	0.73	0.78
tblVehicleEF	MCY	0.49	0.51
tblVehicleEF	MCY	2.75	2.80
tblVehicleEF	MCY	0.71	0.70
tblVehicleEF	MCY	2.21	1.99
tblVehicleEF	MCY	2.3500e-003	2.2750e-003

tblVehicleEF	MCY	6.8100e-004	6.1000e-004
tblVehicleEF	MCY	0.77	0.79
tblVehicleEF	MCY	0.73	0.78
tblVehicleEF	MCY	0.49	0.51
tblVehicleEF	MCY	3.42	3.47
tblVehicleEF	MCY	0.71	0.70
tblVehicleEF	MCY	2.40	2.16
tblVehicleEF	MCY	0.55	0.54
tblVehicleEF	MCY	0.13	0.14
tblVehicleEF	MCY	18.54	19.20
tblVehicleEF	MCY	8.87	8.83
tblVehicleEF	MCY	194.23	193.06
tblVehicleEF	MCY	44.84	46.00
tblVehicleEF	MCY	1.03	1.03
tblVehicleEF	MCY	0.29	0.30
tblVehicleEF	MCY	2.6190e-003	2.5080e-003
tblVehicleEF	MCY	3.5290e-003	3.7870e-003
tblVehicleEF	MCY	2.4450e-003	2.3460e-003
tblVehicleEF	MCY	3.3180e-003	3.5710e-003
tblVehicleEF	MCY	1.92	1.97
tblVehicleEF	MCY	0.87	0.93
tblVehicleEF	MCY	1.24	1.31
tblVehicleEF	MCY	2.64	2.68
tblVehicleEF	MCY	0.65	0.77
tblVehicleEF	MCY	1.84	1.87
tblVehicleEF	MCY	6.4700e-004	6.5900e-004
tblVehicleEF	MCY	1.92	1.97

tblVehicleEF	MCY	0.87	0.93
tblVehicleEF	MCY	1.24	1.31
tblVehicleEF	MCY	3.29	3.32
tblVehicleEF	MCY	0.65	0.77
tblVehicleEF	MCY	2.00	2.03
tblVehicleEF	MCY	0.58	0.58
tblVehicleEF	MCY	0.18	0.19
tblVehicleEF	MCY	21.03	21.90
tblVehicleEF	MCY	11.37	11.25
tblVehicleEF	MCY	194.23	193.06
tblVehicleEF	MCY	44.84	46.00
tblVehicleEF	MCY	1.25	1.26
tblVehicleEF	MCY	0.34	0.34
tblVehicleEF	MCY	2.6190e-003	2.5080e-003
tblVehicleEF	MCY	3.5290e-003	3.7870e-003
tblVehicleEF	MCY	2.4450e-003	2.3460e-003
tblVehicleEF	MCY	3.3180e-003	3.5710e-003
tblVehicleEF	MCY	0.34	0.35
tblVehicleEF	MCY	0.91	1.00
tblVehicleEF	MCY	0.21	0.21
tblVehicleEF	MCY	2.83	2.89
tblVehicleEF	MCY	0.84	0.99
tblVehicleEF	MCY	2.47	2.53
tblVehicleEF	MCY	2.3720e-003	2.3760e-003
tblVehicleEF	MCY	7.0700e-004	7.1900e-004
tblVehicleEF	MCY	0.34	0.35
tblVehicleEF	MCY	0.91	1.00

tblVehicleEF	MCY	0.21	0.21
tblVehicleEF	MCY	3.52	3.57
tblVehicleEF	MCY	0.84	0.99
tblVehicleEF	MCY	0.84	0.99
tblVehicleEF	MCY	2.69	2.76
tblVehicleEF	MCY	2.69	2.76
tblVehicleEF	MDV	5.6430e-003	3.0460e-003
tblVehicleEF	MDV	6.6600e-003	0.06
tblVehicleEF	MDV	0.68	0.69
tblVehicleEF	MDV	1.44	2.72
tblVehicleEF	MDV	417.67	375.26
tblVehicleEF	MDV	86.35	73.63
tblVehicleEF	MDV	0.09	0.11
tblVehicleEF	MDV	0.06	0.05
tblVehicleEF	MDV	0.10	0.23
tblVehicleEF	MDV	2.0890e-003	1.8270e-003
tblVehicleEF	MDV	2.2820e-003	1.7490e-003
tblVehicleEF	MDV	1.9240e-003	1.6850e-003
tblVehicleEF	MDV	2.0980e-003	1.6080e-003
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.10	0.09
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.01	0.01
tblVehicleEF	MDV	0.09	0.05
tblVehicleEF	MDV	0.09	0.27
tblVehicleEF	MDV	4.1750e-003	3.7080e-003
tblVehicleEF	MDV	8.8800e-004	7.2900e-004

tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.10	0.09
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.05
tblVehicleEF	MDV	0.10	0.30
tblVehicleEF	MDV	6.1460e-003	7.7670e-003
tblVehicleEF	MDV	5.5860e-003	7.5720e-003
tblVehicleEF	MDV	0.77	0.90
tblVehicleEF	MDV	1.14	1.41
tblVehicleEF	MDV	442.84	488.04
tblVehicleEF	MDV	86.35	94.54
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	2.0890e-003	2.2400e-003
tblVehicleEF	MDV	2.2820e-003	2.3440e-003
tblVehicleEF	MDV	1.9240e-003	2.0640e-003
tblVehicleEF	MDV	2.0980e-003	2.1550e-003
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.11	0.12
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	4.4280e-003	4.8810e-003
tblVehicleEF	MDV	8.8200e-004	9.6900e-004
tblVehicleEF	MDV	0.08	0.08

tblVehicleEF	MDV	0.11	0.12
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.08	0.11
tblVehicleEF	MDV	5.5630e-003	7.0370e-003
tblVehicleEF	MDV	7.3120e-003	9.9480e-003
tblVehicleEF	MDV	0.68	0.80
tblVehicleEF	MDV	1.63	2.03
tblVehicleEF	MDV	416.79	459.24
tblVehicleEF	MDV	86.35	94.54
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.11	0.15
tblVehicleEF	MDV	2.0890e-003	2.2400e-003
tblVehicleEF	MDV	2.2820e-003	2.3440e-003
tblVehicleEF	MDV	1.9240e-003	2.0640e-003
tblVehicleEF	MDV	2.0980e-003	2.1550e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.11	0.12
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.01	0.02
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.10	0.13
tblVehicleEF	MDV	4.1670e-003	4.5920e-003
tblVehicleEF	MDV	8.9100e-004	9.8000e-004
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.11	0.12

tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.11	0.15
tblVehicleEF	MDV	0.11	0.15
tblVehicleEF	MH	0.01	7.9410e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.64	0.78
tblVehicleEF	MH	3.80	1.96
tblVehicleEF	MH	1,178.74	1,444.02
tblVehicleEF	MH	56.30	17.21
tblVehicleEF	MH	5.6100e-004	5.8400e-004
tblVehicleEF	MH	0.73	0.98
tblVehicleEF	MH	0.57	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	7.9720e-003	0.01
tblVehicleEF	MH	9.4600e-004	2.8400e-004
tblVehicleEF	MH	3.2220e-003	3.2780e-003
tblVehicleEF	MH	7.5840e-003	0.01
tblVehicleEF	MH	8.7000e-004	2.6100e-004
tblVehicleEF	MH	0.27	0.38
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.12	0.15
tblVehicleEF	MH	0.04	0.05
tblVehicleEF	MH	9.0630e-003	9.9170e-003
tblVehicleEF	MH	0.21	0.08

tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.2900e-004	1.7000e-004
tblVehicleEF	MH	0.27	0.38
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.12	0.15
tblVehicleEF	MH	0.05	0.07
tblVehicleEF	MH	9.0630e-003	9.9170e-003
tblVehicleEF	MH	0.23	0.09
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.66	1.06
tblVehicleEF	MH	3.49	4.00
tblVehicleEF	MH	1,178.74	1,185.81
tblVehicleEF	MH	56.30	56.72
tblVehicleEF	MH	0.69	0.78
tblVehicleEF	MH	0.52	0.57
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	7.9720e-003	0.01
tblVehicleEF	MH	9.4600e-004	1.0110e-003
tblVehicleEF	MH	3.2220e-003	3.2230e-003
tblVehicleEF	MH	7.5840e-003	0.01
tblVehicleEF	MH	8.7000e-004	9.3000e-004
tblVehicleEF	MH	0.55	0.70
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	0.26	0.30
tblVehicleEF	MH	0.04	0.06
tblVehicleEF	MH	8.7470e-003	0.01

tblVehicleEF	MH	0.20	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.2300e-004	6.3600e-004
tblVehicleEF	MH	0.55	0.70
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	0.26	0.30
tblVehicleEF	MH	0.05	0.08
tblVehicleEF	MH	8.7470e-003	0.01
tblVehicleEF	MH	0.22	0.25
tblVehicleEF	MH	9.9460e-003	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.62	0.99
tblVehicleEF	MH	4.02	4.62
tblVehicleEF	MH	1,178.74	1,185.81
tblVehicleEF	MH	56.30	56.72
tblVehicleEF	MH	0.75	0.85
tblVehicleEF	MH	0.59	0.65
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	7.9720e-003	0.01
tblVehicleEF	MH	9.4600e-004	1.0110e-003
tblVehicleEF	MH	3.2220e-003	3.2230e-003
tblVehicleEF	MH	7.5840e-003	0.01
tblVehicleEF	MH	8.7000e-004	9.3000e-004
tblVehicleEF	MH	0.17	0.20
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.05	0.06
tblVehicleEF	MH	0.04	0.05

tblVehicleEF	MH	9.7280e-003	0.01
tblVehicleEF	MH	0.22	0.25
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.3200e-004	6.4700e-004
tblVehicleEF	MH	0.17	0.20
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.05	0.06
tblVehicleEF	MH	0.05	0.07
tblVehicleEF	MH	9.7280e-003	0.01
tblVehicleEF	MH	9.7280e-003	0.01
tblVehicleEF	MH	0.24	0.28
tblVehicleEF	MH	0.24	0.28
tblVehicleEF	MHD	0.02	3.1870e-003
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tblVehicleEF	MHD	0.04	7.5740e-003
tblVehicleEF	MHD	0.28	0.50
tblVehicleEF	MHD	0.26	0.19
tblVehicleEF	MHD	3.52	0.85
tblVehicleEF	MHD	165.04	115.14
tblVehicleEF	MHD	1,167.62	1,042.42
tblVehicleEF	MHD	45.62	7.73
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	0.47	0.72
tblVehicleEF	MHD	1.06	1.42
tblVehicleEF	MHD	12.85	1.80
tblVehicleEF	MHD	1.0700e-004	6.2700e-004
tblVehicleEF	MHD	3.0730e-003	6.7340e-003

tblVehicleEF	MHD	5.8900e-004	8.6000e-005
tblVehicleEF	MHD	1.0200e-004	6.0000e-004
tblVehicleEF	MHD	2.9370e-003	6.4390e-003
tblVehicleEF	MHD	5.4200e-004	7.9000e-005
tblVehicleEF	MHD	5.9900e-004	3.0600e-004
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.1100e-004	1.9900e-004
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.01	0.02
tblVehicleEF	MHD	0.22	0.04
tblVehicleEF	MHD	1.5840e-003	1.0890e-003
tblVehicleEF	MHD	0.01	9.9130e-003
tblVehicleEF	MHD	5.1800e-004	7.7000e-005
tblVehicleEF	MHD	5.9900e-004	3.0600e-004
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	4.1100e-004	1.9900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.01	0.02
tblVehicleEF	MHD	0.24	0.04
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	2.7790e-003	3.5180e-003
tblVehicleEF	MHD	0.04	0.04
tblVehicleEF	MHD	0.20	0.22
tblVehicleEF	MHD	0.26	0.30
tblVehicleEF	MHD	3.22	4.26

tblVehicleEF	MHD	174.95	164.67
tblVehicleEF	MHD	1,167.62	1,179.47
tblVehicleEF	MHD	45.62	51.33
tblVehicleEF	MHD	0.48	0.47
tblVehicleEF	MHD	1.02	1.04
tblVehicleEF	MHD	12.81	12.00
tblVehicleEF	MHD	9.0000e-005	1.3400e-004
tblVehicleEF	MHD	3.0730e-003	3.1450e-003
tblVehicleEF	MHD	5.8900e-004	7.2000e-004
tblVehicleEF	MHD	8.6000e-005	1.2800e-004
tblVehicleEF	MHD	2.9370e-003	3.0060e-003
tblVehicleEF	MHD	5.4200e-004	6.6200e-004
tblVehicleEF	MHD	1.1970e-003	1.5510e-003
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	8.2800e-004	1.0170e-003
tblVehicleEF	MHD	0.04	0.04
tblVehicleEF	MHD	0.01	0.02
tblVehicleEF	MHD	0.21	0.27
tblVehicleEF	MHD	1.6770e-003	1.5800e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.1300e-004	5.8800e-004
tblVehicleEF	MHD	1.1970e-003	1.5510e-003
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	8.2800e-004	1.0170e-003
tblVehicleEF	MHD	0.05	0.05

tblVehicleEF	MHD	0.01	0.02
tblVehicleEF	MHD	0.23	0.30
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.7270e-003	3.4210e-003
tblVehicleEF	MHD	0.04	0.05
tblVehicleEF	MHD	0.38	0.41
tblVehicleEF	MHD	0.26	0.30
tblVehicleEF	MHD	3.73	4.94
tblVehicleEF	MHD	151.64	142.73
tblVehicleEF	MHD	1,167.62	1,179.47
tblVehicleEF	MHD	45.62	51.33
tblVehicleEF	MHD	0.45	0.43
tblVehicleEF	MHD	1.08	1.11
tblVehicleEF	MHD	12.87	12.08
tblVehicleEF	MHD	1.3000e-004	1.9300e-004
tblVehicleEF	MHD	3.0730e-003	3.1450e-003
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tblVehicleEF	MHD	3.8100e-004	4.5200e-004
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.0600e-004	2.3200e-004
tblVehicleEF	MHD	0.04	0.04
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.23	0.30

tblVehicleEF	MHD	1.4570e-003	1.3730e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.2100e-004	6.0000e-004
tblVehicleEF	MHD	3.8100e-004	4.5200e-004
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	2.0600e-004	2.3200e-004
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.25	0.33
tblVehicleEF	MHD	0.25	0.33
tblVehicleEF	OBUS	0.01	6.6390e-003
tblVehicleEF	OBUS	4.3940e-003	3.7010e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.24	0.61
tblVehicleEF	OBUS	0.37	0.48
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tblVehicleEF	OBUS	161.78	100.56
tblVehicleEF	OBUS	1,301.27	1,333.01
tblVehicleEF	OBUS	62.08	14.28
tblVehicleEF	OBUS	4.2720e-003	3.4080e-003
tblVehicleEF	OBUS	0.37	0.41
tblVehicleEF	OBUS	1.15	1.59
tblVehicleEF	OBUS	3.97	1.17
tblVehicleEF	OBUS	3.4000e-005	1.3400e-004
tblVehicleEF	OBUS	3.3220e-003	8.1250e-003

tblVehicleEF	OBUS	7.2500e-004	1.4000e-004
tblVehicleEF	OBUS	3.3000e-005	1.2900e-004
tblVehicleEF	OBUS	3.1660e-003	7.7640e-003
tblVehicleEF	OBUS	6.6600e-004	1.2900e-004
tblVehicleEF	OBUS	1.1130e-003	1.0910e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	6.1700e-004	5.6600e-004
tblVehicleEF	OBUS	0.05	0.03
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.28	0.08
tblVehicleEF	OBUS	1.5540e-003	9.5500e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	6.9600e-004	1.4100e-004
tblVehicleEF	OBUS	1.1130e-003	1.0910e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	6.1700e-004	5.6600e-004
tblVehicleEF	OBUS	0.06	0.03
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.30	0.09
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.4830e-003	5.4750e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.23	0.23
tblVehicleEF	OBUS	0.37	0.43
tblVehicleEF	OBUS	3.92	4.35

tblVehicleEF	OBUS	170.49	149.62
tblVehicleEF	OBUS	1,301.27	1,309.44
tblVehicleEF	OBUS	62.08	64.09
tblVehicleEF	OBUS	0.39	0.33
tblVehicleEF	OBUS	1.10	1.05
tblVehicleEF	OBUS	3.91	3.61
tblVehicleEF	OBUS	2.9000e-005	2.5000e-005
tblVehicleEF	OBUS	3.3220e-003	3.1040e-003
tblVehicleEF	OBUS	7.2500e-004	6.6000e-004
tblVehicleEF	OBUS	2.8000e-005	2.4000e-005
tblVehicleEF	OBUS	3.1660e-003	2.9580e-003
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tblVehicleEF	OBUS	2.1200e-003	2.1040e-003
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tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	1.2420e-003	1.2250e-003
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.26	0.28
tblVehicleEF	OBUS	1.6370e-003	1.4390e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	6.9000e-004	7.1700e-004
tblVehicleEF	OBUS	2.1200e-003	2.1040e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.04
tblVehicleEF	OBUS	1.2420e-003	1.2250e-003
tblVehicleEF	OBUS	0.06	0.06

tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.28	0.31
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.3470e-003	5.2770e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.26	0.25
tblVehicleEF	OBUS	0.37	0.42
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tblVehicleEF	OBUS	149.76	131.74
tblVehicleEF	OBUS	1,301.27	1,309.44
tblVehicleEF	OBUS	62.08	64.09
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tblVehicleEF	OBUS	1.17	1.12
tblVehicleEF	OBUS	4.00	3.71
tblVehicleEF	OBUS	4.2000e-005	3.6000e-005
tblVehicleEF	OBUS	3.3220e-003	3.1040e-003
tblVehicleEF	OBUS	7.2500e-004	6.6000e-004
tblVehicleEF	OBUS	4.0000e-005	3.4000e-005
tblVehicleEF	OBUS	3.1660e-003	2.9580e-003
tblVehicleEF	OBUS	6.6600e-004	6.0600e-004
tblVehicleEF	OBUS	8.0300e-004	7.8400e-004
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	2.8100e-004	2.7200e-004
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.29	0.32

tblVehicleEF	OBUS	1.4400e-003	1.2680e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.0000e-004	7.2900e-004
tblVehicleEF	OBUS	8.0300e-004	7.8400e-004
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	2.8100e-004	2.7200e-004
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	0.03	0.03
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tblVehicleEF	OBUS	0.31	0.35
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tblVehicleEF	SBUS	0.80	0.16
tblVehicleEF	SBUS	7.5620e-003	3.3570e-003
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tblVehicleEF	SBUS	58.74	11.79
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tblVehicleEF	SBUS	11.44	1.21
tblVehicleEF	SBUS	4.2990e-003	1.4420e-003
tblVehicleEF	SBUS	0.01	9.6480e-003

tblVehicleEF	SBUS	0.01	9.6500e-003
tblVehicleEF	SBUS	7.7000e-004	1.4900e-004
tblVehicleEF	SBUS	4.1130e-003	1.3800e-003
tblVehicleEF	SBUS	2.6290e-003	2.4120e-003
tblVehicleEF	SBUS	0.01	9.2040e-003
tblVehicleEF	SBUS	7.0800e-004	1.3700e-004
tblVehicleEF	SBUS	3.1740e-003	1.1660e-003
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tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.37	0.07
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tblVehicleEF	SBUS	7.0500e-004	1.1700e-004
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tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.40	0.08
tblVehicleEF	SBUS	0.80	0.81
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tblVehicleEF	SBUS	0.05	0.05
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tblVehicleEF	SBUS	1,120.33	1,152.72
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tblVehicleEF	SBUS	2.38	3.22
tblVehicleEF	SBUS	11.40	11.79
tblVehicleEF	SBUS	3.6240e-003	5.9420e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	7.7000e-004	6.8100e-004
tblVehicleEF	SBUS	3.4670e-003	5.6850e-003
tblVehicleEF	SBUS	2.6290e-003	2.6370e-003
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	7.0800e-004	6.2600e-004
tblVehicleEF	SBUS	5.9580e-003	5.2560e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.97	0.95
tblVehicleEF	SBUS	3.5880e-003	3.1210e-003
tblVehicleEF	SBUS	0.08	0.09
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.31	0.33
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.7800e-004	6.6500e-004
tblVehicleEF	SBUS	5.9580e-003	5.2560e-003

tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	1.41	1.38
tblVehicleEF	SBUS	3.5880e-003	3.1210e-003
tblVehicleEF	SBUS	0.09	0.11
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.34	0.36
tblVehicleEF	SBUS	0.80	0.81
tblVehicleEF	SBUS	7.4710e-003	9.7060e-003
tblVehicleEF	SBUS	0.06	0.07
tblVehicleEF	SBUS	8.38	8.23
tblVehicleEF	SBUS	0.47	0.59
tblVehicleEF	SBUS	8.03	8.50
tblVehicleEF	SBUS	1,009.42	1,036.35
tblVehicleEF	SBUS	1,044.82	1,057.81
tblVehicleEF	SBUS	58.74	57.01
tblVehicleEF	SBUS	5.86	7.55
tblVehicleEF	SBUS	2.54	3.43
tblVehicleEF	SBUS	11.46	11.86
tblVehicleEF	SBUS	5.2310e-003	8.5770e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	7.7000e-004	6.8100e-004
tblVehicleEF	SBUS	5.0040e-003	8.2060e-003
tblVehicleEF	SBUS	2.6290e-003	2.6370e-003
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	7.0800e-004	6.2600e-004
tblVehicleEF	SBUS	2.3540e-003	2.0200e-003

tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.98	0.96
tblVehicleEF	SBUS	8.3900e-004	7.1100e-004
tblVehicleEF	SBUS	0.08	0.09
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.41	0.42
tblVehicleEF	SBUS	9.9230e-003	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	7.2600e-004	7.1600e-004
tblVehicleEF	SBUS	2.3540e-003	2.0200e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	1.41	1.39
tblVehicleEF	SBUS	8.3900e-004	7.1100e-004
tblVehicleEF	SBUS	0.09	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.44	0.46
tblVehicleEF	SBUS	0.44	0.46
tblVehicleEF	UBUS	0.41	1.38
tblVehicleEF	UBUS	0.05	0.00
tblVehicleEF	UBUS	8.11	10.31
tblVehicleEF	UBUS	9.86	0.00
tblVehicleEF	UBUS	2,200.22	1,709.68
tblVehicleEF	UBUS	79.12	0.00
tblVehicleEF	UBUS	2.9830e-003	6.4740e-003
tblVehicleEF	UBUS	13.89	0.75
tblVehicleEF	UBUS	16.33	0.00

tblVehicleEF	UBUS	0.65	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.26	5.4620e-003
tblVehicleEF	UBUS	1.3150e-003	0.00
tblVehicleEF	UBUS	0.28	0.03
tblVehicleEF	UBUS	3.0000e-003	8.6540e-003
tblVehicleEF	UBUS	0.25	5.2260e-003
tblVehicleEF	UBUS	1.2090e-003	0.00
tblVehicleEF	UBUS	3.4350e-003	0.00
tblVehicleEF	UBUS	0.08	0.00
tblVehicleEF	UBUS	1.8030e-003	0.00
tblVehicleEF	UBUS	1.15	0.02
tblVehicleEF	UBUS	0.04	0.00
tblVehicleEF	UBUS	0.68	0.00
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	9.6700e-004	0.00
tblVehicleEF	UBUS	3.4350e-003	0.00
tblVehicleEF	UBUS	0.08	0.00
tblVehicleEF	UBUS	1.8030e-003	0.00
tblVehicleEF	UBUS	1.65	1.41
tblVehicleEF	UBUS	0.04	0.00
tblVehicleEF	UBUS	0.75	0.00
tblVehicleEF	UBUS	0.43	0.43
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	8.26	8.80
tblVehicleEF	UBUS	7.57	7.07
tblVehicleEF	UBUS	2,200.22	2,259.15

tblVehicleEF	UBUS	79.12	65.85
tblVehicleEF	UBUS	13.26	15.09
tblVehicleEF	UBUS	16.25	17.12
tblVehicleEF	UBUS	0.65	0.69
tblVehicleEF	UBUS	0.26	0.30
tblVehicleEF	UBUS	1.3150e-003	1.1580e-003
tblVehicleEF	UBUS	0.28	0.29
tblVehicleEF	UBUS	0.25	0.29
tblVehicleEF	UBUS	1.2090e-003	1.0650e-003
tblVehicleEF	UBUS	7.0130e-003	6.5610e-003
tblVehicleEF	UBUS	0.09	0.08
tblVehicleEF	UBUS	3.6960e-003	3.2820e-003
tblVehicleEF	UBUS	1.18	1.30
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	0.57	0.51
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	9.2700e-004	7.8500e-004
tblVehicleEF	UBUS	7.0130e-003	6.5610e-003
tblVehicleEF	UBUS	0.09	0.08
tblVehicleEF	UBUS	3.6960e-003	3.2820e-003
tblVehicleEF	UBUS	1.70	1.84
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	0.62	0.56
tblVehicleEF	UBUS	0.41	0.41
tblVehicleEF	UBUS	0.06	0.05
tblVehicleEF	UBUS	8.04	8.57
tblVehicleEF	UBUS	11.58	10.92

tblVehicleEF	UBUS	2,200.22	2,259.15
tblVehicleEF	UBUS	79.12	65.85
tblVehicleEF	UBUS	14.10	16.05
tblVehicleEF	UBUS	16.37	17.22
tblVehicleEF	UBUS	0.65	0.69
tblVehicleEF	UBUS	0.26	0.30
tblVehicleEF	UBUS	1.3150e-003	1.1580e-003
tblVehicleEF	UBUS	0.28	0.29
tblVehicleEF	UBUS	0.25	0.29
tblVehicleEF	UBUS	1.2090e-003	1.0650e-003
tblVehicleEF	UBUS	2.0120e-003	1.7960e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	6.6800e-004	5.5600e-004
tblVehicleEF	UBUS	1.13	1.25
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	0.76	0.69
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	9.9700e-004	8.5200e-004
tblVehicleEF	UBUS	2.0120e-003	1.7960e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	6.6800e-004	5.5600e-004
tblVehicleEF	UBUS	1.63	1.77
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	0.83	0.76
tblVehicleEF	UBUS	0.83	0.76
tblVehicleTrips	CC_TTP	82.30	48.00

tblVehicleTrips	CC_TTP	0.00	48.00
tblVehicleTrips	CNW_TTP	5.00	19.00
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CW_TTP	12.70	33.00
tblVehicleTrips	CW_TTP	0.00	33.00
tblVehicleTrips	DV_TP	58.00	28.00
tblVehicleTrips	DV_TP	0.00	28.00
tblVehicleTrips	PB_TP	14.00	6.00
tblVehicleTrips	PB_TP	0.00	6.00
tblVehicleTrips	PR_TP	28.00	66.00
tblVehicleTrips	PR_TP	0.00	66.00
tblVehicleTrips	ST_TR	6.39	1.77
tblVehicleTrips	ST_TR	6.21	7.10
tblVehicleTrips	ST_TR	0.00	21.95
tblVehicleTrips	SU_TR	5.86	1.77
tblVehicleTrips	SU_TR	5.83	7.10
tblVehicleTrips	SU_TR	0.00	21.95
tblVehicleTrips	WD_TR	6.65	1.77
tblVehicleTrips	WD_TR	74.06	7.10
tblVehicleTrips	WD_TR	0.00	21.95
tblWoodstoves	NumberCatalytic	14.00	0.00
tblWoodstoves	NumberNoncatalytic	14.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021											0.0000	34.2180	34.2180	9.5700e-003	0.0000	34.4574
Maximum											**0.0000**	**34.2180**	**34.2180**	**9.5700e-003**	**0.0000**	**34.4574**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021											0.0000	34.2180	34.2180	9.5700e-003	0.0000	34.4574
Maximum											**0.0000**	**34.2180**	**34.2180**	**9.5700e-003**	**0.0000**	**34.4574**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	8.4904	8.4904	8.1300e-003	0.0000	8.6936
Energy											0.0000	665.2515	665.2515	0.0446	0.0139	670.5001
Mobile											0.0000	859.5080	859.5080	0.0310	0.0000	860.2818
Stationary											0.0000	22.9621	22.9621	3.2200e-003	0.0000	23.0426
Waste											68.0020	0.0000	68.0020	4.0188	0.0000	168.4720
Water											14.6053	41.3806	55.9859	1.5048	0.0364	104.4471
Total											**82.6073**	**1,597.5925**	**1,680.1998**	**5.6104**	**0.0503**	**1,835.4371**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	8.4904	8.4904	8.1300e-003	0.0000	8.6936
Energy											0.0000	665.2515	665.2515	0.0446	0.0139	670.5001
Mobile											0.0000	859.5080	859.5080	0.0310	0.0000	860.2818
Stationary											0.0000	22.9621	22.9621	3.2200e-003	0.0000	23.0426
Waste											68.0020	0.0000	68.0020	4.0188	0.0000	168.4720
Water											14.6053	41.3806	55.9859	1.5048	0.0364	104.4471
Total											**82.6073**	**1,597.5925**	**1,680.1998**	**5.6104**	**0.0503**	**1,835.4371**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	1/28/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	34.0008	34.0008	9.5700e-003	0.0000	34.2400
Total											**0.0000**	**34.0008**	**34.0008**	**9.5700e-003**	**0.0000**	**34.2400**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2173	0.2173	0.0000	0.0000	0.2174
Total											**0.0000**	**0.2173**	**0.2173**	**0.0000**	**0.0000**	**0.2174**

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	34.0007	34.0007	9.5700e-003	0.0000	34.2400
Total											**0.0000**	**34.0007**	**34.0007**	**9.5700e-003**	**0.0000**	**34.2400**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2173	0.2173	0.0000	0.0000	0.2174
Total											**0.0000**	**0.2173**	**0.2173**	**0.0000**	**0.0000**	**0.2174**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	859.5080	859.5080	0.0310	0.0000	860.2818
Unmitigated											0.0000	859.5080	859.5080	0.0310	0.0000	860.2818

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,239.00	1,239.00	1239.00	2,861,603	2,861,603
Day-Care Center	71.00	71.00	71.00	151,575	151,575
Enclosed Parking with Elevator	0.00	0.00	0.00		
User Defined Parking	21.95	21.95	21.95	46,860	46,860
Total	1,331.95	1,331.95	1,331.95	3,060,038	3,060,038

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Day-Care Center	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
User Defined Parking	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Day-Care Center	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Enclosed Parking with Elevator	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
User Defined Parking	0.179362	0.016959	0.053679	0.420000	0.000000	0.090000	0.190000	0.050000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	341.0921	341.0921	0.0383	7.9300e-003	344.4145
Electricity Unmitigated											0.0000	341.0921	341.0921	0.0383	7.9300e-003	344.4145
NaturalGas Mitigated											0.0000	324.1593	324.1593	6.2100e-003	5.9400e-003	326.0857
NaturalGas Unmitigated											0.0000	324.1593	324.1593	6.2100e-003	5.9400e-003	326.0857

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	5.90982e+006											0.0000	315.3703	315.3703	6.0400e-003	5.7800e-003	317.2444
Day-Care Center	164700											0.0000	8.7890	8.7890	1.7000e-004	1.6000e-004	8.8413
Enclosed Parking with Elevator	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**324.1593**	**324.1593**	**6.2100e-003**	**5.9400e-003**	**326.0857**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	5.90982e+006											0.0000	315.3703	315.3703	6.0400e-003	5.7800e-003	317.2444
Day-Care Center	164700											0.0000	8.7890	8.7890	1.7000e-004	1.6000e-004	8.8413
Enclosed Parking with Elevator	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**324.1593**	**324.1593**	**6.2100e-003**	**5.9400e-003**	**326.0857**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	2.87364e+006	336.2931	0.0378	7.8200e-003	339.5687
Day-Care Center	41008.1	4.7991	5.4000e-004	1.1000e-004	4.8458
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**341.0921**	**0.0383**	**7.9300e-003**	**344.4145**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	2.87364e+006	336.2931	0.0378	7.8200e-003	339.5687
Day-Care Center	41008.1	4.7991	5.4000e-004	1.1000e-004	4.8458
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**341.0921**	**0.0383**	**7.9300e-003**	**344.4145**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	8.4904	8.4904	8.1300e-003	0.0000	8.6936
Unmitigated											0.0000	8.4904	8.4904	8.1300e-003	0.0000	8.6936

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	8.4904	8.4904	8.1300e-003	0.0000	8.6936
Total											**0.0000**	**8.4904**	**8.4904**	**8.1300e-003**	**0.0000**	**8.6936**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	8.4904	8.4904	8.1300e-003	0.0000	8.6936
Total											**0.0000**	**8.4904**	**8.4904**	**8.1300e-003**	**0.0000**	**8.6936**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	55.9859	1.5048	0.0364	104.4471
Unmitigated	55.9859	1.5048	0.0364	104.4471

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	45.6078 / 28.7528	55.1266	1.4907	0.0360	103.1329
Day-Care Center	0.428896 / 1.10287	0.8594	0.0141	3.5000e-004	1.3142
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**55.9859**	**1.5048**	**0.0364**	**104.4471**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	45.6078 / 28.7528	55.1266	1.4907	0.0360	103.1329
Day-Care Center	0.428896 / 1.10287	0.8594	0.0141	3.5000e-004	1.3142
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**55.9859**	**1.5048**	**0.0364**	**104.4471**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	68.0020	4.0188	0.0000	168.4720
Unmitigated	68.0020	4.0188	0.0000	168.4720

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	322	65.3631	3.8629	0.0000	161.9343
Day-Care Center	13	2.6389	0.1560	0.0000	6.5377
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**68.0020**	**4.0188**	**0.0000**	**168.4720**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	322	65.3631	3.8629	0.0000	161.9343
Day-Care Center	13	2.6389	0.1560	0.0000	6.5377
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**68.0020**	**4.0188**	**0.0000**	**168.4720**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	3	2	50	402	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (300 - 600 HP)											0.0000	22.9621	22.9621	3.2200e-003	0.0000	23.0426
Total											**0.0000**	**22.9621**	**22.9621**	**3.2200e-003**	**0.0000**	**23.0426**

11.0 Vegetation

Balboa Reservoir, Operational: Variant Option - Phase 2

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	10.00	1000sqft	0.23	10,000.00	0
Enclosed Parking with Elevator	0.00	Space	0.00	0.00	0
User Defined Parking	1.00	User Defined Unit	0.00	0.00	0
Apartments Mid Rise	700.00	Dwelling Unit	18.42	154,700.00	2002

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2027
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Balboa Reservoir, Operational: Variant Option - Phase 2 - San Francisco County, Annual

Project Characteristics - CO2 Intensity Factor is adjusted to account for RPS decreases.

Land Use - Residential square footage scaled based on total residential gross ksf, consistent with the Project description.

Construction Phase - Construction is evaluated separately.

Off-road Equipment -

Vehicle Trips - Operational trips based on May 14, 2019 Kittelson & Assoc traffic analysis.

Vehicle Emission Factors - Mobile emission factors updated based on EMFAC2017.

Vehicle Emission Factors - EMFAC 2017 for 2027

Vehicle Emission Factors - EMFAC 2017 for 2027

Woodstoves - Assumed no apartment fireplaces, per Project Sponsor.

Energy Use - For Apartments and Condos: Assumed 10% electricity and lighting energy reduction, and 4.7% natural gas energy reduction consistent with 2019 Title 24. For all other landuses, assumed 10.7% electricity and lighting energy reduction, and 1% natural gas ener

Water And Wastewater -

Solid Waste -

Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	0	4584
tblAreaCoating	Area_Residential_Exterior	104423	358425
tblAreaCoating	Area_Residential_Interior	313268	1075275
tblEnergyUse	LightingElect	741.44	667.30
tblEnergyUse	LightingElect	2.58	2.24
tblEnergyUse	LightingElect	2.63	1.56
tblEnergyUse	NT24E	3,277.06	3,054.10
tblEnergyUse	T24E	502.89	383.81
tblEnergyUse	T24E	0.69	0.59
tblEnergyUse	T24E	3.92	3.50
tblEnergyUse	T24NG	8,824.58	5,827.60
tblEnergyUse	T24NG	14.93	14.85

tblFireplaces	NumberGas	105.00	0.00
tblFireplaces	NumberNoFireplace	28.00	700.00
tblFireplaces	NumberWood	119.00	0.00
tblFleetMix	FleetMixLandUseSubType	Day-Care Center	Apartments Mid Rise
tblFleetMix	FleetMixLandUseSubType	Enclosed Parking with Elevator	Day-Care Center
tblFleetMix	FleetMixLandUseSubType	User Defined Parking	Enclosed Parking with Elevator
tblFleetMix	FleetMixLandUseSubType	Apartments Mid Rise	User Defined Parking
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tblFleetMix	HHD	9.4710e-003	0.00
tblFleetMix	HHD	9.4710e-003	0.00
tblFleetMix	HHD	9.4710e-003	0.05
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.72
tblFleetMix	LDA	0.60	0.18
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.07
tblFleetMix	LDT1	0.04	0.02
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.21
tblFleetMix	LDT2	0.19	0.05
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00

tblFleetMix	LHD2	5.1840e-003	0.00
tblFleetMix	LHD2	5.1840e-003	0.00
tblFleetMix	LHD2	5.1840e-003	0.00
tblFleetMix	LHD2	5.1840e-003	0.09
tblFleetMix	MCY	5.9520e-003	0.00
tblFleetMix	MCY	5.9520e-003	0.00
tblFleetMix	MCY	5.9520e-003	0.00
tblFleetMix	MCY	5.9520e-003	0.00
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tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.00
tblFleetMix	MDV	0.09	0.42
tblFleetMix	MH	5.6100e-004	0.00
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tblFleetMix	OBUS	4.2720e-003	0.00
tblFleetMix	OBUS	4.2720e-003	0.00
tblFleetMix	OBUS	4.2720e-003	0.00
tblFleetMix	OBUS	4.2720e-003	0.00
tblFleetMix	SBUS	9.5600e-004	0.00
tblFleetMix	SBUS	9.5600e-004	0.00
tblFleetMix	SBUS	9.5600e-004	0.00

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tblFleetMix	UBUS	2.9830e-003	0.00
tblFleetMix	UBUS	2.9830e-003	0.00
tblFleetMix	UBUS	2.9830e-003	0.00
tblFleetMix	UBUS	2.9830e-003	0.00
tblLandUse	BuildingSpaceSquareFeet	700,000.00	154,700.00
tblLandUse	LandUseSquareFeet	700,000.00	154,700.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	0
tblProjectCharacteristics	OperationalYear	2018	2027
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	402.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	2.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	3.00
tblTripsAndVMT	WorkerTripNumber	15.00	3.00
tblVehicleEF	HHD	0.44	0.05
tblVehicleEF	HHD	0.40	0.35
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tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	7.5960e-003	0.02
tblVehicleEF	HHD	1.7400e-004	2.0000e-006
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tblVehicleEF	HHD	8.5310e-003	8.7170e-003
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tblVehicleEF	HHD	7.8500e-004	2.4900e-004
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tblVehicleEF	HHD	0.03	0.03
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tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	7.2670e-003	8.0860e-003
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tblVehicleEF	HHD	8.8800e-004	7.5200e-004
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tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	0.01	0.02
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tblVehicleEF	HHD	6.2000e-005	4.9000e-005
tblVehicleEF	HHD	4.9960e-003	4.3680e-003
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tblVehicleEF	HHD	3.5000e-005	2.7000e-005
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tblVehicleEF	HHD	8.8800e-004	7.5200e-004
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tblVehicleEF	HHD	0.11	0.11
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tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.04	0.17
tblVehicleEF	LDA	1.8790e-003	1.7070e-003
tblVehicleEF	LDA	2.1490e-003	1.7140e-003
tblVehicleEF	LDA	1.7300e-003	1.5720e-003
tblVehicleEF	LDA	1.9760e-003	1.5760e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	7.1430e-003	7.6970e-003
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.04	0.20
tblVehicleEF	LDA	2.2010e-003	2.4670e-003
tblVehicleEF	LDA	4.8000e-004	4.9400e-004
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.07	0.09
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tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.04	0.22
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tblVehicleEF	LDA	2.5210e-003	3.5580e-003
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tblVehicleEF	LDA	46.71	52.61
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	1.8790e-003	2.0930e-003
tblVehicleEF	LDA	2.1490e-003	2.2530e-003
tblVehicleEF	LDA	1.7300e-003	1.9270e-003
tblVehicleEF	LDA	1.9760e-003	2.0710e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	7.7880e-003	0.01
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	2.3410e-003	2.6490e-003
tblVehicleEF	LDA	4.7700e-004	5.3900e-004
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	2.7870e-003	3.5900e-003
tblVehicleEF	LDA	3.3000e-003	4.6640e-003
tblVehicleEF	LDA	0.41	0.49
tblVehicleEF	LDA	0.90	1.14

tblVehicleEF	LDA	219.46	248.27
tblVehicleEF	LDA	46.71	52.61
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	1.8790e-003	2.0930e-003
tblVehicleEF	LDA	2.1490e-003	2.2530e-003
tblVehicleEF	LDA	1.7300e-003	1.9270e-003
tblVehicleEF	LDA	1.9760e-003	2.0710e-003
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.07	0.09
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	7.0370e-003	9.0760e-003
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	2.1960e-003	2.4850e-003
tblVehicleEF	LDA	4.8200e-004	5.4500e-004
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.07	0.09
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tblVehicleEF	LDA	0.01	0.01
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tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDT1	4.4890e-003	3.3460e-003
tblVehicleEF	LDT1	5.7740e-003	0.05
tblVehicleEF	LDT1	0.59	0.77

tblVehicleEF	LDT1	1.36	2.29
tblVehicleEF	LDT1	278.99	301.05
tblVehicleEF	LDT1	60.02	60.36
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.07	0.21
tblVehicleEF	LDT1	2.1360e-003	1.9580e-003
tblVehicleEF	LDT1	2.4390e-003	1.9990e-003
tblVehicleEF	LDT1	1.9650e-003	1.8020e-003
tblVehicleEF	LDT1	2.2430e-003	1.8380e-003
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.01	0.01
tblVehicleEF	LDT1	0.11	0.07
tblVehicleEF	LDT1	0.08	0.25
tblVehicleEF	LDT1	2.7950e-003	2.9790e-003
tblVehicleEF	LDT1	6.2300e-004	5.9700e-004
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.11	0.07
tblVehicleEF	LDT1	0.09	0.28
tblVehicleEF	LDT1	4.8820e-003	6.5020e-003
tblVehicleEF	LDT1	4.8220e-003	6.8970e-003
tblVehicleEF	LDT1	0.67	0.84

tblVehicleEF	LDT1	1.07	1.42
tblVehicleEF	LDT1	296.24	329.94
tblVehicleEF	LDT1	60.02	66.21
tblVehicleEF	LDT1	0.04	0.06
tblVehicleEF	LDT1	0.06	0.09
tblVehicleEF	LDT1	2.1360e-003	2.3520e-003
tblVehicleEF	LDT1	2.4390e-003	2.5880e-003
tblVehicleEF	LDT1	1.9650e-003	2.1640e-003
tblVehicleEF	LDT1	2.2430e-003	2.3800e-003
tblVehicleEF	LDT1	0.09	0.11
tblVehicleEF	LDT1	0.14	0.17
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.01	0.02
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.07	0.09
tblVehicleEF	LDT1	2.9680e-003	3.3070e-003
tblVehicleEF	LDT1	6.1800e-004	6.8600e-004
tblVehicleEF	LDT1	0.09	0.11
tblVehicleEF	LDT1	0.14	0.17
tblVehicleEF	LDT1	0.08	0.09
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.10	0.11
tblVehicleEF	LDT1	0.07	0.10
tblVehicleEF	LDT1	4.4250e-003	5.9110e-003
tblVehicleEF	LDT1	6.3510e-003	9.1220e-003
tblVehicleEF	LDT1	0.59	0.74
tblVehicleEF	LDT1	1.54	2.05

tblVehicleEF	LDT1	278.39	310.08
tblVehicleEF	LDT1	60.02	66.21
tblVehicleEF	LDT1	0.05	0.07
tblVehicleEF	LDT1	0.08	0.11
tblVehicleEF	LDT1	2.1360e-003	2.3520e-003
tblVehicleEF	LDT1	2.4390e-003	2.5880e-003
tblVehicleEF	LDT1	1.9650e-003	2.1640e-003
tblVehicleEF	LDT1	2.2430e-003	2.3800e-003
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.14	0.17
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.01	0.01
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.09	0.12
tblVehicleEF	LDT1	2.7880e-003	3.1070e-003
tblVehicleEF	LDT1	6.2600e-004	6.9700e-004
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.14	0.17
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.14	0.15
tblVehicleEF	LDT1	0.09	0.13
tblVehicleEF	LDT1	0.09	0.13
tblVehicleEF	LDT2	4.0670e-003	3.0070e-003
tblVehicleEF	LDT2	3.8900e-003	0.06
tblVehicleEF	LDT2	0.56	0.71

tblVehicleEF	LDT2	1.01	2.68
tblVehicleEF	LDT2	315.12	318.38
tblVehicleEF	LDT2	66.58	64.11
tblVehicleEF	LDT2	0.19	0.17
tblVehicleEF	LDT2	0.04	0.05
tblVehicleEF	LDT2	0.06	0.23
tblVehicleEF	LDT2	2.0530e-003	1.7430e-003
tblVehicleEF	LDT2	2.3100e-003	1.6970e-003
tblVehicleEF	LDT2	1.8880e-003	1.6040e-003
tblVehicleEF	LDT2	2.1240e-003	1.5600e-003
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.07	0.10
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.05	0.27
tblVehicleEF	LDT2	3.1540e-003	3.1490e-003
tblVehicleEF	LDT2	6.8200e-004	6.3400e-004
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.07	0.10
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.06	0.06
tblVehicleEF	LDT2	0.06	0.29
tblVehicleEF	LDT2	4.4360e-003	5.4610e-003
tblVehicleEF	LDT2	3.2750e-003	4.3540e-003
tblVehicleEF	LDT2	0.63	0.72

tblVehicleEF	LDT2	0.81	0.97
tblVehicleEF	LDT2	334.70	371.94
tblVehicleEF	LDT2	66.58	73.70
tblVehicleEF	LDT2	0.04	0.05
tblVehicleEF	LDT2	0.05	0.07
tblVehicleEF	LDT2	2.0530e-003	2.1760e-003
tblVehicleEF	LDT2	2.3100e-003	2.3270e-003
tblVehicleEF	LDT2	1.8880e-003	2.0010e-003
tblVehicleEF	LDT2	2.1240e-003	2.1400e-003
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.01	0.01
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	3.3510e-003	3.7240e-003
tblVehicleEF	LDT2	6.7900e-004	7.5300e-004
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	4.0060e-003	4.9320e-003
tblVehicleEF	LDT2	4.2630e-003	5.7010e-003
tblVehicleEF	LDT2	0.56	0.64
tblVehicleEF	LDT2	1.14	1.38

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tblVehicleEF	LDT2	66.58	73.70
tblVehicleEF	LDT2	0.05	0.06
tblVehicleEF	LDT2	0.07	0.09
tblVehicleEF	LDT2	2.0530e-003	2.1760e-003
tblVehicleEF	LDT2	2.3100e-003	2.3270e-003
tblVehicleEF	LDT2	1.8880e-003	2.0010e-003
tblVehicleEF	LDT2	2.1240e-003	2.1400e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	9.9620e-003	0.01
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	3.1480e-003	3.4980e-003
tblVehicleEF	LDT2	6.8400e-004	7.6000e-004
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.08	0.08
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LHD1	4.9030e-003	5.7060e-003
tblVehicleEF	LHD1	9.7570e-003	6.6600e-003
tblVehicleEF	LHD1	0.01	0.01

tblVehicleEF	LHD1	0.15	0.20
tblVehicleEF	LHD1	0.63	0.58
tblVehicleEF	LHD1	1.95	1.10
tblVehicleEF	LHD1	8.79	8.63
tblVehicleEF	LHD1	666.50	806.60
tblVehicleEF	LHD1	32.01	12.89
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.45	0.34
tblVehicleEF	LHD1	0.87	0.33
tblVehicleEF	LHD1	7.1700e-004	6.8000e-004
tblVehicleEF	LHD1	0.01	9.5380e-003
tblVehicleEF	LHD1	9.2180e-003	6.6230e-003
tblVehicleEF	LHD1	7.0000e-004	2.4000e-004
tblVehicleEF	LHD1	6.8600e-004	6.5100e-004
tblVehicleEF	LHD1	2.5410e-003	2.3840e-003
tblVehicleEF	LHD1	8.7840e-003	6.2890e-003
tblVehicleEF	LHD1	6.4400e-004	2.2100e-004
tblVehicleEF	LHD1	1.6780e-003	1.4240e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.1380e-003	9.2100e-004
tblVehicleEF	LHD1	0.09	0.07
tblVehicleEF	LHD1	0.27	0.16
tblVehicleEF	LHD1	0.19	0.07
tblVehicleEF	LHD1	8.8000e-005	8.4000e-005
tblVehicleEF	LHD1	6.5320e-003	7.8940e-003

tblVehicleEF	LHD1	3.5600e-004	1.2800e-004
tblVehicleEF	LHD1	1.6780e-003	1.4240e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.1380e-003	9.2100e-004
tblVehicleEF	LHD1	0.11	0.09
tblVehicleEF	LHD1	0.27	0.16
tblVehicleEF	LHD1	0.20	0.07
tblVehicleEF	LHD1	4.9030e-003	5.6310e-003
tblVehicleEF	LHD1	9.9900e-003	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.15	0.15
tblVehicleEF	LHD1	0.64	0.77
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tblVehicleEF	LHD1	8.79	8.76
tblVehicleEF	LHD1	666.50	690.52
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tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD1	0.43	0.57
tblVehicleEF	LHD1	0.80	0.95
tblVehicleEF	LHD1	7.1700e-004	7.0900e-004
tblVehicleEF	LHD1	0.01	9.9640e-003
tblVehicleEF	LHD1	9.2180e-003	9.9640e-003
tblVehicleEF	LHD1	7.0000e-004	8.1300e-004
tblVehicleEF	LHD1	6.8600e-004	6.7800e-004
tblVehicleEF	LHD1	2.5410e-003	2.4910e-003
tblVehicleEF	LHD1	8.7840e-003	9.4940e-003

tblVehicleEF	LHD1	6.4400e-004	7.4800e-004
tblVehicleEF	LHD1	3.2740e-003	3.7230e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.2070e-003	2.4410e-003
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	0.25	0.27
tblVehicleEF	LHD1	0.17	0.22
tblVehicleEF	LHD1	6.5330e-003	6.7850e-003
tblVehicleEF	LHD1	3.5400e-004	3.9200e-004
tblVehicleEF	LHD1	3.2740e-003	3.7230e-003
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.2070e-003	2.4410e-003
tblVehicleEF	LHD1	0.11	0.12
tblVehicleEF	LHD1	0.25	0.27
tblVehicleEF	LHD1	0.19	0.24
tblVehicleEF	LHD1	4.9030e-003	5.6310e-003
tblVehicleEF	LHD1	9.6270e-003	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.15	0.15
tblVehicleEF	LHD1	0.63	0.74
tblVehicleEF	LHD1	2.06	2.46
tblVehicleEF	LHD1	8.79	8.76
tblVehicleEF	LHD1	666.50	690.52
tblVehicleEF	LHD1	32.01	35.12
tblVehicleEF	LHD1	0.06	0.06

tblVehicleEF	LHD1	0.46	0.62
tblVehicleEF	LHD1	0.91	1.08
tblVehicleEF	LHD1	7.1700e-004	7.0900e-004
tblVehicleEF	LHD1	0.01	9.9640e-003
tblVehicleEF	LHD1	9.2180e-003	9.9640e-003
tblVehicleEF	LHD1	7.0000e-004	8.1300e-004
tblVehicleEF	LHD1	6.8600e-004	6.7800e-004
tblVehicleEF	LHD1	2.5410e-003	2.4910e-003
tblVehicleEF	LHD1	8.7840e-003	9.4940e-003
tblVehicleEF	LHD1	6.4400e-004	7.4800e-004
tblVehicleEF	LHD1	1.0810e-003	1.1850e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	5.8600e-004	6.2900e-004
tblVehicleEF	LHD1	0.09	0.09
tblVehicleEF	LHD1	0.29	0.31
tblVehicleEF	LHD1	0.19	0.24
tblVehicleEF	LHD1	6.5320e-003	6.7840e-003
tblVehicleEF	LHD1	3.5800e-004	3.9700e-004
tblVehicleEF	LHD1	1.0810e-003	1.1850e-003
tblVehicleEF	LHD1	0.09	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	5.8600e-004	6.2900e-004
tblVehicleEF	LHD1	0.11	0.11
tblVehicleEF	LHD1	0.29	0.31
tblVehicleEF	LHD1	0.29	0.31
tblVehicleEF	LHD1	0.21	0.27

tblVehicleEF	LHD1	0.21	0.27
tblVehicleEF	LHD2	2.8130e-003	3.3650e-003
tblVehicleEF	LHD2	5.7530e-003	6.0180e-003
tblVehicleEF	LHD2	4.0620e-003	7.6680e-003
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.47	0.52
tblVehicleEF	LHD2	0.97	0.65
tblVehicleEF	LHD2	13.71	13.47
tblVehicleEF	LHD2	684.83	765.11
tblVehicleEF	LHD2	22.72	8.40
tblVehicleEF	LHD2	5.1840e-003	5.5390e-003
tblVehicleEF	LHD2	0.08	0.08
tblVehicleEF	LHD2	0.28	0.47
tblVehicleEF	LHD2	0.32	0.19
tblVehicleEF	LHD2	1.1150e-003	1.3540e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7400e-004	1.2600e-004
tblVehicleEF	LHD2	1.0660e-003	1.2960e-003
tblVehicleEF	LHD2	2.7020e-003	2.6650e-003
tblVehicleEF	LHD2	9.6070e-003	0.01
tblVehicleEF	LHD2	3.4400e-004	1.1600e-004
tblVehicleEF	LHD2	4.7800e-004	8.0100e-004
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	3.3100e-004	5.0800e-004
tblVehicleEF	LHD2	0.09	0.10

tblVehicleEF	LHD2	0.05	0.09
tblVehicleEF	LHD2	0.05	0.04
tblVehicleEF	LHD2	1.3400e-004	1.2900e-004
tblVehicleEF	LHD2	6.6560e-003	7.3990e-003
tblVehicleEF	LHD2	2.4400e-004	8.3000e-005
tblVehicleEF	LHD2	4.7800e-004	8.0100e-004
tblVehicleEF	LHD2	0.02	0.04
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	3.3100e-004	5.0800e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.05	0.09
tblVehicleEF	LHD2	0.06	0.04
tblVehicleEF	LHD2	2.8130e-003	3.2090e-003
tblVehicleEF	LHD2	5.8110e-003	6.8030e-003
tblVehicleEF	LHD2	3.8740e-003	5.3080e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.47	0.51
tblVehicleEF	LHD2	0.90	1.03
tblVehicleEF	LHD2	13.71	13.84
tblVehicleEF	LHD2	684.83	698.44
tblVehicleEF	LHD2	22.72	23.92
tblVehicleEF	LHD2	0.08	0.09
tblVehicleEF	LHD2	0.27	0.42
tblVehicleEF	LHD2	0.30	0.38
tblVehicleEF	LHD2	1.1150e-003	1.1970e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01

tblVehicleEF	LHD2	3.7400e-004	3.9100e-004
tblVehicleEF	LHD2	1.0660e-003	1.1450e-003
tblVehicleEF	LHD2	2.7020e-003	2.6920e-003
tblVehicleEF	LHD2	9.6070e-003	0.01
tblVehicleEF	LHD2	3.4400e-004	3.5900e-004
tblVehicleEF	LHD2	9.4400e-004	1.1730e-003
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	6.5500e-004	7.7100e-004
tblVehicleEF	LHD2	0.09	0.10
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.05	0.07
tblVehicleEF	LHD2	1.3400e-004	1.3500e-004
tblVehicleEF	LHD2	6.6560e-003	6.7910e-003
tblVehicleEF	LHD2	2.4300e-004	2.5700e-004
tblVehicleEF	LHD2	9.4400e-004	1.1730e-003
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.5500e-004	7.7100e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.06	0.08
tblVehicleEF	LHD2	2.8130e-003	3.2090e-003
tblVehicleEF	LHD2	5.7210e-003	6.6590e-003
tblVehicleEF	LHD2	4.1800e-003	5.8010e-003
tblVehicleEF	LHD2	0.12	0.12
tblVehicleEF	LHD2	0.46	0.50

tblVehicleEF	LHD2	1.02	1.17
tblVehicleEF	LHD2	13.71	13.84
tblVehicleEF	LHD2	684.83	698.44
tblVehicleEF	LHD2	22.72	23.92
tblVehicleEF	LHD2	0.08	0.09
tblVehicleEF	LHD2	0.29	0.45
tblVehicleEF	LHD2	0.33	0.42
tblVehicleEF	LHD2	1.1150e-003	1.1970e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7400e-004	3.9100e-004
tblVehicleEF	LHD2	1.0660e-003	1.1450e-003
tblVehicleEF	LHD2	2.7020e-003	2.6920e-003
tblVehicleEF	LHD2	9.6070e-003	0.01
tblVehicleEF	LHD2	3.4400e-004	3.5900e-004
tblVehicleEF	LHD2	3.0900e-004	3.6600e-004
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	1.6900e-004	1.9400e-004
tblVehicleEF	LHD2	0.09	0.10
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.06	0.08
tblVehicleEF	LHD2	1.3400e-004	1.3500e-004
tblVehicleEF	LHD2	6.6560e-003	6.7910e-003
tblVehicleEF	LHD2	2.4500e-004	2.6000e-004
tblVehicleEF	LHD2	3.0900e-004	3.6600e-004
tblVehicleEF	LHD2	0.02	0.03

tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.6900e-004	1.9400e-004
tblVehicleEF	LHD2	0.11	0.11
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.06	0.07
tblVehicleEF	LHD2	0.06	0.09
tblVehicleEF	LHD2	0.06	0.09
tblVehicleEF	MCY	0.57	0.40
tblVehicleEF	MCY	0.16	0.25
tblVehicleEF	MCY	19.84	20.63
tblVehicleEF	MCY	10.27	9.07
tblVehicleEF	MCY	194.23	229.85
tblVehicleEF	MCY	44.84	61.66
tblVehicleEF	MCY	5.9520e-003	7.1020e-003
tblVehicleEF	MCY	1.18	1.19
tblVehicleEF	MCY	0.32	0.28
tblVehicleEF	MCY	2.6190e-003	2.3850e-003
tblVehicleEF	MCY	3.5290e-003	2.9930e-003
tblVehicleEF	MCY	2.4450e-003	2.2300e-003
tblVehicleEF	MCY	3.3180e-003	2.8200e-003
tblVehicleEF	MCY	0.77	0.79
tblVehicleEF	MCY	0.73	0.78
tblVehicleEF	MCY	0.49	0.51
tblVehicleEF	MCY	2.75	2.80
tblVehicleEF	MCY	0.71	0.70
tblVehicleEF	MCY	2.21	1.99
tblVehicleEF	MCY	2.3500e-003	2.2750e-003

tblVehicleEF	MCY	6.8100e-004	6.1000e-004
tblVehicleEF	MCY	0.77	0.79
tblVehicleEF	MCY	0.73	0.78
tblVehicleEF	MCY	0.49	0.51
tblVehicleEF	MCY	3.42	3.47
tblVehicleEF	MCY	0.71	0.70
tblVehicleEF	MCY	2.40	2.16
tblVehicleEF	MCY	0.55	0.54
tblVehicleEF	MCY	0.13	0.14
tblVehicleEF	MCY	18.54	19.20
tblVehicleEF	MCY	8.87	8.83
tblVehicleEF	MCY	194.23	193.06
tblVehicleEF	MCY	44.84	46.00
tblVehicleEF	MCY	1.03	1.03
tblVehicleEF	MCY	0.29	0.30
tblVehicleEF	MCY	2.6190e-003	2.5080e-003
tblVehicleEF	MCY	3.5290e-003	3.7870e-003
tblVehicleEF	MCY	2.4450e-003	2.3460e-003
tblVehicleEF	MCY	3.3180e-003	3.5710e-003
tblVehicleEF	MCY	1.92	1.97
tblVehicleEF	MCY	0.87	0.93
tblVehicleEF	MCY	1.24	1.31
tblVehicleEF	MCY	2.64	2.68
tblVehicleEF	MCY	0.65	0.77
tblVehicleEF	MCY	1.84	1.87
tblVehicleEF	MCY	6.4700e-004	6.5900e-004
tblVehicleEF	MCY	1.92	1.97

tblVehicleEF	MCY	0.87	0.93
tblVehicleEF	MCY	1.24	1.31
tblVehicleEF	MCY	3.29	3.32
tblVehicleEF	MCY	0.65	0.77
tblVehicleEF	MCY	2.00	2.03
tblVehicleEF	MCY	0.58	0.58
tblVehicleEF	MCY	0.18	0.19
tblVehicleEF	MCY	21.03	21.90
tblVehicleEF	MCY	11.37	11.25
tblVehicleEF	MCY	194.23	193.06
tblVehicleEF	MCY	44.84	46.00
tblVehicleEF	MCY	1.25	1.26
tblVehicleEF	MCY	0.34	0.34
tblVehicleEF	MCY	2.6190e-003	2.5080e-003
tblVehicleEF	MCY	3.5290e-003	3.7870e-003
tblVehicleEF	MCY	2.4450e-003	2.3460e-003
tblVehicleEF	MCY	3.3180e-003	3.5710e-003
tblVehicleEF	MCY	0.34	0.35
tblVehicleEF	MCY	0.91	1.00
tblVehicleEF	MCY	0.21	0.21
tblVehicleEF	MCY	2.83	2.89
tblVehicleEF	MCY	0.84	0.99
tblVehicleEF	MCY	2.47	2.53
tblVehicleEF	MCY	2.3720e-003	2.3760e-003
tblVehicleEF	MCY	7.0700e-004	7.1900e-004
tblVehicleEF	MCY	0.34	0.35
tblVehicleEF	MCY	0.91	1.00

tblVehicleEF	MCY	0.21	0.21
tblVehicleEF	MCY	3.52	3.57
tblVehicleEF	MCY	0.84	0.99
tblVehicleEF	MCY	0.84	0.99
tblVehicleEF	MCY	2.69	2.76
tblVehicleEF	MCY	2.69	2.76
tblVehicleEF	MDV	5.6430e-003	3.0460e-003
tblVehicleEF	MDV	6.6600e-003	0.06
tblVehicleEF	MDV	0.68	0.69
tblVehicleEF	MDV	1.44	2.72
tblVehicleEF	MDV	417.67	375.26
tblVehicleEF	MDV	86.35	73.63
tblVehicleEF	MDV	0.09	0.11
tblVehicleEF	MDV	0.06	0.05
tblVehicleEF	MDV	0.10	0.23
tblVehicleEF	MDV	2.0890e-003	1.8270e-003
tblVehicleEF	MDV	2.2820e-003	1.7490e-003
tblVehicleEF	MDV	1.9240e-003	1.6850e-003
tblVehicleEF	MDV	2.0980e-003	1.6080e-003
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.10	0.09
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.01	0.01
tblVehicleEF	MDV	0.09	0.05
tblVehicleEF	MDV	0.09	0.27
tblVehicleEF	MDV	4.1750e-003	3.7080e-003
tblVehicleEF	MDV	8.8800e-004	7.2900e-004

tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.10	0.09
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.05
tblVehicleEF	MDV	0.10	0.30
tblVehicleEF	MDV	6.1460e-003	7.7670e-003
tblVehicleEF	MDV	5.5860e-003	7.5720e-003
tblVehicleEF	MDV	0.77	0.90
tblVehicleEF	MDV	1.14	1.41
tblVehicleEF	MDV	442.84	488.04
tblVehicleEF	MDV	86.35	94.54
tblVehicleEF	MDV	0.05	0.07
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	2.0890e-003	2.2400e-003
tblVehicleEF	MDV	2.2820e-003	2.3440e-003
tblVehicleEF	MDV	1.9240e-003	2.0640e-003
tblVehicleEF	MDV	2.0980e-003	2.1550e-003
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.11	0.12
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	4.4280e-003	4.8810e-003
tblVehicleEF	MDV	8.8200e-004	9.6900e-004
tblVehicleEF	MDV	0.08	0.08

tblVehicleEF	MDV	0.11	0.12
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.08	0.08
tblVehicleEF	MDV	0.08	0.11
tblVehicleEF	MDV	5.5630e-003	7.0370e-003
tblVehicleEF	MDV	7.3120e-003	9.9480e-003
tblVehicleEF	MDV	0.68	0.80
tblVehicleEF	MDV	1.63	2.03
tblVehicleEF	MDV	416.79	459.24
tblVehicleEF	MDV	86.35	94.54
tblVehicleEF	MDV	0.07	0.09
tblVehicleEF	MDV	0.11	0.15
tblVehicleEF	MDV	2.0890e-003	2.2400e-003
tblVehicleEF	MDV	2.2820e-003	2.3440e-003
tblVehicleEF	MDV	1.9240e-003	2.0640e-003
tblVehicleEF	MDV	2.0980e-003	2.1550e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.11	0.12
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.01	0.02
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.10	0.13
tblVehicleEF	MDV	4.1670e-003	4.5920e-003
tblVehicleEF	MDV	8.9100e-004	9.8000e-004
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.11	0.12

tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.11	0.11
tblVehicleEF	MDV	0.11	0.15
tblVehicleEF	MDV	0.11	0.15
tblVehicleEF	MH	0.01	7.9410e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.64	0.78
tblVehicleEF	MH	3.80	1.96
tblVehicleEF	MH	1,178.74	1,444.02
tblVehicleEF	MH	56.30	17.21
tblVehicleEF	MH	5.6100e-004	5.8400e-004
tblVehicleEF	MH	0.73	0.98
tblVehicleEF	MH	0.57	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	7.9720e-003	0.01
tblVehicleEF	MH	9.4600e-004	2.8400e-004
tblVehicleEF	MH	3.2220e-003	3.2780e-003
tblVehicleEF	MH	7.5840e-003	0.01
tblVehicleEF	MH	8.7000e-004	2.6100e-004
tblVehicleEF	MH	0.27	0.38
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.12	0.15
tblVehicleEF	MH	0.04	0.05
tblVehicleEF	MH	9.0630e-003	9.9170e-003
tblVehicleEF	MH	0.21	0.08

tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.2900e-004	1.7000e-004
tblVehicleEF	MH	0.27	0.38
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.12	0.15
tblVehicleEF	MH	0.05	0.07
tblVehicleEF	MH	9.0630e-003	9.9170e-003
tblVehicleEF	MH	0.23	0.09
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.66	1.06
tblVehicleEF	MH	3.49	4.00
tblVehicleEF	MH	1,178.74	1,185.81
tblVehicleEF	MH	56.30	56.72
tblVehicleEF	MH	0.69	0.78
tblVehicleEF	MH	0.52	0.57
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	7.9720e-003	0.01
tblVehicleEF	MH	9.4600e-004	1.0110e-003
tblVehicleEF	MH	3.2220e-003	3.2230e-003
tblVehicleEF	MH	7.5840e-003	0.01
tblVehicleEF	MH	8.7000e-004	9.3000e-004
tblVehicleEF	MH	0.55	0.70
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	0.26	0.30
tblVehicleEF	MH	0.04	0.06
tblVehicleEF	MH	8.7470e-003	0.01

tblVehicleEF	MH	0.20	0.23
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.2300e-004	6.3600e-004
tblVehicleEF	MH	0.55	0.70
tblVehicleEF	MH	0.03	0.03
tblVehicleEF	MH	0.26	0.30
tblVehicleEF	MH	0.05	0.08
tblVehicleEF	MH	8.7470e-003	0.01
tblVehicleEF	MH	0.22	0.25
tblVehicleEF	MH	9.9460e-003	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.62	0.99
tblVehicleEF	MH	4.02	4.62
tblVehicleEF	MH	1,178.74	1,185.81
tblVehicleEF	MH	56.30	56.72
tblVehicleEF	MH	0.75	0.85
tblVehicleEF	MH	0.59	0.65
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	7.9720e-003	0.01
tblVehicleEF	MH	9.4600e-004	1.0110e-003
tblVehicleEF	MH	3.2220e-003	3.2230e-003
tblVehicleEF	MH	7.5840e-003	0.01
tblVehicleEF	MH	8.7000e-004	9.3000e-004
tblVehicleEF	MH	0.17	0.20
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.05	0.06
tblVehicleEF	MH	0.04	0.05

tblVehicleEF	MH	9.7280e-003	0.01
tblVehicleEF	MH	0.22	0.25
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.3200e-004	6.4700e-004
tblVehicleEF	MH	0.17	0.20
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	0.05	0.06
tblVehicleEF	MH	0.05	0.07
tblVehicleEF	MH	9.7280e-003	0.01
tblVehicleEF	MH	9.7280e-003	0.01
tblVehicleEF	MH	0.24	0.28
tblVehicleEF	MH	0.24	0.28
tblVehicleEF	MHD	0.02	3.1870e-003
tblVehicleEF	MHD	2.7450e-003	1.3420e-003
tblVehicleEF	MHD	0.04	7.5740e-003
tblVehicleEF	MHD	0.28	0.50
tblVehicleEF	MHD	0.26	0.19
tblVehicleEF	MHD	3.52	0.85
tblVehicleEF	MHD	165.04	115.14
tblVehicleEF	MHD	1,167.62	1,042.42
tblVehicleEF	MHD	45.62	7.73
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	0.47	0.72
tblVehicleEF	MHD	1.06	1.42
tblVehicleEF	MHD	12.85	1.80
tblVehicleEF	MHD	1.0700e-004	6.2700e-004
tblVehicleEF	MHD	3.0730e-003	6.7340e-003

tblVehicleEF	MHD	5.8900e-004	8.6000e-005
tblVehicleEF	MHD	1.0200e-004	6.0000e-004
tblVehicleEF	MHD	2.9370e-003	6.4390e-003
tblVehicleEF	MHD	5.4200e-004	7.9000e-005
tblVehicleEF	MHD	5.9900e-004	3.0600e-004
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	4.1100e-004	1.9900e-004
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.01	0.02
tblVehicleEF	MHD	0.22	0.04
tblVehicleEF	MHD	1.5840e-003	1.0890e-003
tblVehicleEF	MHD	0.01	9.9130e-003
tblVehicleEF	MHD	5.1800e-004	7.7000e-005
tblVehicleEF	MHD	5.9900e-004	3.0600e-004
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	4.1100e-004	1.9900e-004
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	0.01	0.02
tblVehicleEF	MHD	0.24	0.04
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	2.7790e-003	3.5180e-003
tblVehicleEF	MHD	0.04	0.04
tblVehicleEF	MHD	0.20	0.22
tblVehicleEF	MHD	0.26	0.30
tblVehicleEF	MHD	3.22	4.26

tblVehicleEF	MHD	174.95	164.67
tblVehicleEF	MHD	1,167.62	1,179.47
tblVehicleEF	MHD	45.62	51.33
tblVehicleEF	MHD	0.48	0.47
tblVehicleEF	MHD	1.02	1.04
tblVehicleEF	MHD	12.81	12.00
tblVehicleEF	MHD	9.0000e-005	1.3400e-004
tblVehicleEF	MHD	3.0730e-003	3.1450e-003
tblVehicleEF	MHD	5.8900e-004	7.2000e-004
tblVehicleEF	MHD	8.6000e-005	1.2800e-004
tblVehicleEF	MHD	2.9370e-003	3.0060e-003
tblVehicleEF	MHD	5.4200e-004	6.6200e-004
tblVehicleEF	MHD	1.1970e-003	1.5510e-003
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	8.2800e-004	1.0170e-003
tblVehicleEF	MHD	0.04	0.04
tblVehicleEF	MHD	0.01	0.02
tblVehicleEF	MHD	0.21	0.27
tblVehicleEF	MHD	1.6770e-003	1.5800e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.1300e-004	5.8800e-004
tblVehicleEF	MHD	1.1970e-003	1.5510e-003
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	8.2800e-004	1.0170e-003
tblVehicleEF	MHD	0.05	0.05

tblVehicleEF	MHD	0.01	0.02
tblVehicleEF	MHD	0.23	0.30
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.7270e-003	3.4210e-003
tblVehicleEF	MHD	0.04	0.05
tblVehicleEF	MHD	0.38	0.41
tblVehicleEF	MHD	0.26	0.30
tblVehicleEF	MHD	3.73	4.94
tblVehicleEF	MHD	151.64	142.73
tblVehicleEF	MHD	1,167.62	1,179.47
tblVehicleEF	MHD	45.62	51.33
tblVehicleEF	MHD	0.45	0.43
tblVehicleEF	MHD	1.08	1.11
tblVehicleEF	MHD	12.87	12.08
tblVehicleEF	MHD	1.3000e-004	1.9300e-004
tblVehicleEF	MHD	3.0730e-003	3.1450e-003
tblVehicleEF	MHD	5.8900e-004	7.2000e-004
tblVehicleEF	MHD	1.2400e-004	1.8500e-004
tblVehicleEF	MHD	2.9370e-003	3.0060e-003
tblVehicleEF	MHD	5.4200e-004	6.6200e-004
tblVehicleEF	MHD	3.8100e-004	4.5200e-004
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	2.0600e-004	2.3200e-004
tblVehicleEF	MHD	0.04	0.04
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.23	0.30

tblVehicleEF	MHD	1.4570e-003	1.3730e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	5.2100e-004	6.0000e-004
tblVehicleEF	MHD	3.8100e-004	4.5200e-004
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	2.0600e-004	2.3200e-004
tblVehicleEF	MHD	0.05	0.05
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.25	0.33
tblVehicleEF	MHD	0.25	0.33
tblVehicleEF	OBUS	0.01	6.6390e-003
tblVehicleEF	OBUS	4.3940e-003	3.7010e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.24	0.61
tblVehicleEF	OBUS	0.37	0.48
tblVehicleEF	OBUS	4.27	1.70
tblVehicleEF	OBUS	161.78	100.56
tblVehicleEF	OBUS	1,301.27	1,333.01
tblVehicleEF	OBUS	62.08	14.28
tblVehicleEF	OBUS	4.2720e-003	3.4080e-003
tblVehicleEF	OBUS	0.37	0.41
tblVehicleEF	OBUS	1.15	1.59
tblVehicleEF	OBUS	3.97	1.17
tblVehicleEF	OBUS	3.4000e-005	1.3400e-004
tblVehicleEF	OBUS	3.3220e-003	8.1250e-003

tblVehicleEF	OBUS	7.2500e-004	1.4000e-004
tblVehicleEF	OBUS	3.3000e-005	1.2900e-004
tblVehicleEF	OBUS	3.1660e-003	7.7640e-003
tblVehicleEF	OBUS	6.6600e-004	1.2900e-004
tblVehicleEF	OBUS	1.1130e-003	1.0910e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	6.1700e-004	5.6600e-004
tblVehicleEF	OBUS	0.05	0.03
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.28	0.08
tblVehicleEF	OBUS	1.5540e-003	9.5500e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	6.9600e-004	1.4100e-004
tblVehicleEF	OBUS	1.1130e-003	1.0910e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.06
tblVehicleEF	OBUS	6.1700e-004	5.6600e-004
tblVehicleEF	OBUS	0.06	0.03
tblVehicleEF	OBUS	0.03	0.04
tblVehicleEF	OBUS	0.30	0.09
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.4830e-003	5.4750e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.23	0.23
tblVehicleEF	OBUS	0.37	0.43
tblVehicleEF	OBUS	3.92	4.35

tblVehicleEF	OBUS	170.49	149.62
tblVehicleEF	OBUS	1,301.27	1,309.44
tblVehicleEF	OBUS	62.08	64.09
tblVehicleEF	OBUS	0.39	0.33
tblVehicleEF	OBUS	1.10	1.05
tblVehicleEF	OBUS	3.91	3.61
tblVehicleEF	OBUS	2.9000e-005	2.5000e-005
tblVehicleEF	OBUS	3.3220e-003	3.1040e-003
tblVehicleEF	OBUS	7.2500e-004	6.6000e-004
tblVehicleEF	OBUS	2.8000e-005	2.4000e-005
tblVehicleEF	OBUS	3.1660e-003	2.9580e-003
tblVehicleEF	OBUS	6.6600e-004	6.0600e-004
tblVehicleEF	OBUS	2.1200e-003	2.1040e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	1.2420e-003	1.2250e-003
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.26	0.28
tblVehicleEF	OBUS	1.6370e-003	1.4390e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	6.9000e-004	7.1700e-004
tblVehicleEF	OBUS	2.1200e-003	2.1040e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.04
tblVehicleEF	OBUS	1.2420e-003	1.2250e-003
tblVehicleEF	OBUS	0.06	0.06

tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.28	0.31
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	4.3470e-003	5.2770e-003
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.26	0.25
tblVehicleEF	OBUS	0.37	0.42
tblVehicleEF	OBUS	4.51	5.01
tblVehicleEF	OBUS	149.76	131.74
tblVehicleEF	OBUS	1,301.27	1,309.44
tblVehicleEF	OBUS	62.08	64.09
tblVehicleEF	OBUS	0.36	0.31
tblVehicleEF	OBUS	1.17	1.12
tblVehicleEF	OBUS	4.00	3.71
tblVehicleEF	OBUS	4.2000e-005	3.6000e-005
tblVehicleEF	OBUS	3.3220e-003	3.1040e-003
tblVehicleEF	OBUS	7.2500e-004	6.6000e-004
tblVehicleEF	OBUS	4.0000e-005	3.4000e-005
tblVehicleEF	OBUS	3.1660e-003	2.9580e-003
tblVehicleEF	OBUS	6.6600e-004	6.0600e-004
tblVehicleEF	OBUS	8.0300e-004	7.8400e-004
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	2.8100e-004	2.7200e-004
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.29	0.32

tblVehicleEF	OBUS	1.4400e-003	1.2680e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.0000e-004	7.2900e-004
tblVehicleEF	OBUS	8.0300e-004	7.8400e-004
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.05
tblVehicleEF	OBUS	2.8100e-004	2.7200e-004
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.31	0.35
tblVehicleEF	OBUS	0.31	0.35
tblVehicleEF	SBUS	0.80	0.16
tblVehicleEF	SBUS	7.5620e-003	3.3570e-003
tblVehicleEF	SBUS	0.06	0.01
tblVehicleEF	SBUS	8.27	5.87
tblVehicleEF	SBUS	0.47	0.28
tblVehicleEF	SBUS	6.79	1.80
tblVehicleEF	SBUS	1,073.75	390.07
tblVehicleEF	SBUS	1,044.82	932.50
tblVehicleEF	SBUS	58.74	11.79
tblVehicleEF	SBUS	9.5600e-004	1.0360e-003
tblVehicleEF	SBUS	6.13	2.10
tblVehicleEF	SBUS	2.50	1.47
tblVehicleEF	SBUS	11.44	1.21
tblVehicleEF	SBUS	4.2990e-003	1.4420e-003
tblVehicleEF	SBUS	0.01	9.6480e-003

tblVehicleEF	SBUS	0.01	9.6500e-003
tblVehicleEF	SBUS	7.7000e-004	1.4900e-004
tblVehicleEF	SBUS	4.1130e-003	1.3800e-003
tblVehicleEF	SBUS	2.6290e-003	2.4120e-003
tblVehicleEF	SBUS	0.01	9.2040e-003
tblVehicleEF	SBUS	7.0800e-004	1.3700e-004
tblVehicleEF	SBUS	3.1740e-003	1.1660e-003
tblVehicleEF	SBUS	0.04	0.01
tblVehicleEF	SBUS	0.97	0.71
tblVehicleEF	SBUS	1.8100e-003	6.2300e-004
tblVehicleEF	SBUS	0.08	0.03
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.37	0.07
tblVehicleEF	SBUS	0.01	3.7520e-003
tblVehicleEF	SBUS	0.01	9.0210e-003
tblVehicleEF	SBUS	7.0500e-004	1.1700e-004
tblVehicleEF	SBUS	3.1740e-003	1.1660e-003
tblVehicleEF	SBUS	0.04	0.01
tblVehicleEF	SBUS	1.41	1.03
tblVehicleEF	SBUS	1.8100e-003	6.2300e-004
tblVehicleEF	SBUS	0.09	0.04
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.40	0.08
tblVehicleEF	SBUS	0.80	0.81
tblVehicleEF	SBUS	7.7250e-003	0.01
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	8.19	8.00

tblVehicleEF	SBUS	0.48	0.61
tblVehicleEF	SBUS	5.15	5.45
tblVehicleEF	SBUS	1,120.33	1,152.72
tblVehicleEF	SBUS	1,044.82	1,057.81
tblVehicleEF	SBUS	58.74	57.01
tblVehicleEF	SBUS	6.32	8.15
tblVehicleEF	SBUS	2.38	3.22
tblVehicleEF	SBUS	11.40	11.79
tblVehicleEF	SBUS	3.6240e-003	5.9420e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	7.7000e-004	6.8100e-004
tblVehicleEF	SBUS	3.4670e-003	5.6850e-003
tblVehicleEF	SBUS	2.6290e-003	2.6370e-003
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	7.0800e-004	6.2600e-004
tblVehicleEF	SBUS	5.9580e-003	5.2560e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.97	0.95
tblVehicleEF	SBUS	3.5880e-003	3.1210e-003
tblVehicleEF	SBUS	0.08	0.09
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.31	0.33
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.7800e-004	6.6500e-004
tblVehicleEF	SBUS	5.9580e-003	5.2560e-003

tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	1.41	1.38
tblVehicleEF	SBUS	3.5880e-003	3.1210e-003
tblVehicleEF	SBUS	0.09	0.11
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.34	0.36
tblVehicleEF	SBUS	0.80	0.81
tblVehicleEF	SBUS	7.4710e-003	9.7060e-003
tblVehicleEF	SBUS	0.06	0.07
tblVehicleEF	SBUS	8.38	8.23
tblVehicleEF	SBUS	0.47	0.59
tblVehicleEF	SBUS	8.03	8.50
tblVehicleEF	SBUS	1,009.42	1,036.35
tblVehicleEF	SBUS	1,044.82	1,057.81
tblVehicleEF	SBUS	58.74	57.01
tblVehicleEF	SBUS	5.86	7.55
tblVehicleEF	SBUS	2.54	3.43
tblVehicleEF	SBUS	11.46	11.86
tblVehicleEF	SBUS	5.2310e-003	8.5770e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	7.7000e-004	6.8100e-004
tblVehicleEF	SBUS	5.0040e-003	8.2060e-003
tblVehicleEF	SBUS	2.6290e-003	2.6370e-003
tblVehicleEF	SBUS	0.01	0.02
tblVehicleEF	SBUS	7.0800e-004	6.2600e-004
tblVehicleEF	SBUS	2.3540e-003	2.0200e-003

tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	0.98	0.96
tblVehicleEF	SBUS	8.3900e-004	7.1100e-004
tblVehicleEF	SBUS	0.08	0.09
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.41	0.42
tblVehicleEF	SBUS	9.9230e-003	0.01
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	7.2600e-004	7.1600e-004
tblVehicleEF	SBUS	2.3540e-003	2.0200e-003
tblVehicleEF	SBUS	0.04	0.03
tblVehicleEF	SBUS	1.41	1.39
tblVehicleEF	SBUS	8.3900e-004	7.1100e-004
tblVehicleEF	SBUS	0.09	0.11
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.44	0.46
tblVehicleEF	SBUS	0.44	0.46
tblVehicleEF	UBUS	0.41	1.38
tblVehicleEF	UBUS	0.05	0.00
tblVehicleEF	UBUS	8.11	10.31
tblVehicleEF	UBUS	9.86	0.00
tblVehicleEF	UBUS	2,200.22	1,709.68
tblVehicleEF	UBUS	79.12	0.00
tblVehicleEF	UBUS	2.9830e-003	6.4740e-003
tblVehicleEF	UBUS	13.89	0.75
tblVehicleEF	UBUS	16.33	0.00

tblVehicleEF	UBUS	0.65	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.26	5.4620e-003
tblVehicleEF	UBUS	1.3150e-003	0.00
tblVehicleEF	UBUS	0.28	0.03
tblVehicleEF	UBUS	3.0000e-003	8.6540e-003
tblVehicleEF	UBUS	0.25	5.2260e-003
tblVehicleEF	UBUS	1.2090e-003	0.00
tblVehicleEF	UBUS	3.4350e-003	0.00
tblVehicleEF	UBUS	0.08	0.00
tblVehicleEF	UBUS	1.8030e-003	0.00
tblVehicleEF	UBUS	1.15	0.02
tblVehicleEF	UBUS	0.04	0.00
tblVehicleEF	UBUS	0.68	0.00
tblVehicleEF	UBUS	0.02	0.01
tblVehicleEF	UBUS	9.6700e-004	0.00
tblVehicleEF	UBUS	3.4350e-003	0.00
tblVehicleEF	UBUS	0.08	0.00
tblVehicleEF	UBUS	1.8030e-003	0.00
tblVehicleEF	UBUS	1.65	1.41
tblVehicleEF	UBUS	0.04	0.00
tblVehicleEF	UBUS	0.75	0.00
tblVehicleEF	UBUS	0.43	0.43
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	8.26	8.80
tblVehicleEF	UBUS	7.57	7.07
tblVehicleEF	UBUS	2,200.22	2,259.15

tblVehicleEF	UBUS	79.12	65.85
tblVehicleEF	UBUS	13.26	15.09
tblVehicleEF	UBUS	16.25	17.12
tblVehicleEF	UBUS	0.65	0.69
tblVehicleEF	UBUS	0.26	0.30
tblVehicleEF	UBUS	1.3150e-003	1.1580e-003
tblVehicleEF	UBUS	0.28	0.29
tblVehicleEF	UBUS	0.25	0.29
tblVehicleEF	UBUS	1.2090e-003	1.0650e-003
tblVehicleEF	UBUS	7.0130e-003	6.5610e-003
tblVehicleEF	UBUS	0.09	0.08
tblVehicleEF	UBUS	3.6960e-003	3.2820e-003
tblVehicleEF	UBUS	1.18	1.30
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	0.57	0.51
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	9.2700e-004	7.8500e-004
tblVehicleEF	UBUS	7.0130e-003	6.5610e-003
tblVehicleEF	UBUS	0.09	0.08
tblVehicleEF	UBUS	3.6960e-003	3.2820e-003
tblVehicleEF	UBUS	1.70	1.84
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	0.62	0.56
tblVehicleEF	UBUS	0.41	0.41
tblVehicleEF	UBUS	0.06	0.05
tblVehicleEF	UBUS	8.04	8.57
tblVehicleEF	UBUS	11.58	10.92

tblVehicleEF	UBUS	2,200.22	2,259.15
tblVehicleEF	UBUS	79.12	65.85
tblVehicleEF	UBUS	14.10	16.05
tblVehicleEF	UBUS	16.37	17.22
tblVehicleEF	UBUS	0.65	0.69
tblVehicleEF	UBUS	0.26	0.30
tblVehicleEF	UBUS	1.3150e-003	1.1580e-003
tblVehicleEF	UBUS	0.28	0.29
tblVehicleEF	UBUS	0.25	0.29
tblVehicleEF	UBUS	1.2090e-003	1.0650e-003
tblVehicleEF	UBUS	2.0120e-003	1.7960e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	6.6800e-004	5.5600e-004
tblVehicleEF	UBUS	1.13	1.25
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	0.76	0.69
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	9.9700e-004	8.5200e-004
tblVehicleEF	UBUS	2.0120e-003	1.7960e-003
tblVehicleEF	UBUS	0.11	0.11
tblVehicleEF	UBUS	6.6800e-004	5.5600e-004
tblVehicleEF	UBUS	1.63	1.77
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	0.83	0.76
tblVehicleEF	UBUS	0.83	0.76
tblVehicleTrips	CC_TTP	82.30	48.00

tblVehicleTrips	CC_TTP	0.00	48.00
tblVehicleTrips	CNW_TTP	5.00	19.00
tblVehicleTrips	CNW_TTP	0.00	19.00
tblVehicleTrips	CW_TTP	12.70	33.00
tblVehicleTrips	CW_TTP	0.00	33.00
tblVehicleTrips	DV_TP	58.00	28.00
tblVehicleTrips	DV_TP	0.00	28.00
tblVehicleTrips	PB_TP	14.00	6.00
tblVehicleTrips	PB_TP	0.00	6.00
tblVehicleTrips	PR_TP	28.00	66.00
tblVehicleTrips	PR_TP	0.00	66.00
tblVehicleTrips	ST_TR	6.39	1.77
tblVehicleTrips	ST_TR	6.21	7.10
tblVehicleTrips	ST_TR	0.00	21.95
tblVehicleTrips	SU_TR	5.86	1.77
tblVehicleTrips	SU_TR	5.83	7.10
tblVehicleTrips	SU_TR	0.00	21.95
tblVehicleTrips	WD_TR	6.65	1.77
tblVehicleTrips	WD_TR	74.06	7.10
tblVehicleTrips	WD_TR	0.00	21.95
tblWoodstoves	NumberCatalytic	14.00	0.00
tblWoodstoves	NumberNoncatalytic	14.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021											0.0000	34.2180	34.2180	9.5700e-003	0.0000	34.4574
Maximum											**0.0000**	**34.2180**	**34.2180**	**9.5700e-003**	**0.0000**	**34.4574**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021											0.0000	34.2180	34.2180	9.5700e-003	0.0000	34.4574
Maximum											**0.0000**	**34.2180**	**34.2180**	**9.5700e-003**	**0.0000**	**34.4574**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	8.4904	8.4904	8.1300e-003	0.0000	8.6936
Energy											0.0000	324.1593	324.1593	0.0446	0.0139	329.4080
Mobile											0.0000	859.5080	859.5080	0.0310	0.0000	860.2818
Stationary											0.0000	22.9621	22.9621	3.2200e-003	0.0000	23.0426
Waste											68.0020	0.0000	68.0020	4.0188	0.0000	168.4720
Water											14.6053	0.0000	14.6053	1.5048	0.0364	63.0665
Total											**82.6073**	**1,215.1198**	**1,297.7271**	**5.6104**	**0.0503**	**1,452.9644**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area											0.0000	8.4904	8.4904	8.1300e-003	0.0000	8.6936
Energy											0.0000	324.1593	324.1593	0.0446	0.0139	329.4080
Mobile											0.0000	859.5080	859.5080	0.0310	0.0000	860.2818
Stationary											0.0000	22.9621	22.9621	3.2200e-003	0.0000	23.0426
Waste											68.0020	0.0000	68.0020	4.0188	0.0000	168.4720
Water											14.6053	0.0000	14.6053	1.5048	0.0364	63.0665
Total											**82.6073**	**1,215.1198**	**1,297.7271**	**5.6104**	**0.0503**	**1,452.9644**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2021	1/28/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	34.0008	34.0008	9.5700e-003	0.0000	34.2400
Total											**0.0000**	**34.0008**	**34.0008**	**9.5700e-003**	**0.0000**	**34.2400**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2173	0.2173	0.0000	0.0000	0.2174
Total											**0.0000**	**0.2173**	**0.2173**	**0.0000**	**0.0000**	**0.2174**

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road											0.0000	34.0007	34.0007	9.5700e-003	0.0000	34.2400
Total											**0.0000**	**34.0007**	**34.0007**	**9.5700e-003**	**0.0000**	**34.2400**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker											0.0000	0.2173	0.2173	0.0000	0.0000	0.2174
Total											**0.0000**	**0.2173**	**0.2173**	**0.0000**	**0.0000**	**0.2174**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	859.5080	859.5080	0.0310	0.0000	860.2818
Unmitigated											0.0000	859.5080	859.5080	0.0310	0.0000	860.2818

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,239.00	1,239.00	1239.00	2,861,603	2,861,603
Day-Care Center	71.00	71.00	71.00	151,575	151,575
Enclosed Parking with Elevator	0.00	0.00	0.00		
User Defined Parking	21.95	21.95	21.95	46,860	46,860
Total	1,331.95	1,331.95	1,331.95	3,060,038	3,060,038

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Day-Care Center	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
User Defined Parking	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Day-Care Center	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Enclosed Parking with Elevator	0.717448	0.067838	0.214714	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
User Defined Parking	0.179362	0.016959	0.053679	0.420000	0.000000	0.090000	0.190000	0.050000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated											0.0000	0.0000	0.0000	0.0383	7.9300e-003	3.3223
Electricity Unmitigated											0.0000	0.0000	0.0000	0.0383	7.9300e-003	3.3223
NaturalGas Mitigated											0.0000	324.1593	324.1593	6.2100e-003	5.9400e-003	326.0857
NaturalGas Unmitigated											0.0000	324.1593	324.1593	6.2100e-003	5.9400e-003	326.0857

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	5.90982e+006											0.0000	315.3703	315.3703	6.0400e-003	5.7800e-003	317.2444
Day-Care Center	164700											0.0000	8.7890	8.7890	1.7000e-004	1.6000e-004	8.8413
Enclosed Parking with Elevator	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**324.1593**	**324.1593**	**6.2100e-003**	**5.9400e-003**	**326.0857**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	5.90982e+006											0.0000	315.3703	315.3703	6.0400e-003	5.7800e-003	317.2444
Day-Care Center	164700											0.0000	8.7890	8.7890	1.7000e-004	1.6000e-004	8.8413
Enclosed Parking with Elevator	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total												**0.0000**	**324.1593**	**324.1593**	**6.2100e-003**	**5.9400e-003**	**326.0857**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	2.87364e+006	0.0000	0.0378	7.8200e-003	3.2756
Day-Care Center	41008.1	0.0000	5.4000e-004	1.1000e-004	0.0467
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0383**	**7.9300e-003**	**3.3223**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	2.87364e+006	0.0000	0.0378	7.8200e-003	3.2756
Day-Care Center	41008.1	0.0000	5.4000e-004	1.1000e-004	0.0467
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0383**	**7.9300e-003**	**3.3223**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated											0.0000	8.4904	8.4904	8.1300e-003	0.0000	8.6936
Unmitigated											0.0000	8.4904	8.4904	8.1300e-003	0.0000	8.6936

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	8.4904	8.4904	8.1300e-003	0.0000	8.6936
Total											**0.0000**	**8.4904**	**8.4904**	**8.1300e-003**	**0.0000**	**8.6936**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth											0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping											0.0000	8.4904	8.4904	8.1300e-003	0.0000	8.6936
Total											**0.0000**	**8.4904**	**8.4904**	**8.1300e-003**	**0.0000**	**8.6936**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	14.6053	1.5048	0.0364	63.0665
Unmitigated	14.6053	1.5048	0.0364	63.0665

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	45.6078 / 28.7528	14.4693	1.4907	0.0360	62.4756
Day-Care Center	0.428896 / 1.10287	0.1361	0.0141	3.5000e-004	0.5908
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**14.6053**	**1.5048**	**0.0364**	**63.0665**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	45.6078 / 28.7528	14.4693	1.4907	0.0360	62.4756
Day-Care Center	0.428896 / 1.10287	0.1361	0.0141	3.5000e-004	0.5908
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**14.6053**	**1.5048**	**0.0364**	**63.0665**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	68.0020	4.0188	0.0000	168.4720
Unmitigated	68.0020	4.0188	0.0000	168.4720

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	322	65.3631	3.8629	0.0000	161.9343
Day-Care Center	13	2.6389	0.1560	0.0000	6.5377
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**68.0020**	**4.0188**	**0.0000**	**168.4720**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	322	65.3631	3.8629	0.0000	161.9343
Day-Care Center	13	2.6389	0.1560	0.0000	6.5377
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
User Defined Parking	0	0.0000	0.0000	0.0000	0.0000
Total		**68.0020**	**4.0188**	**0.0000**	**168.4720**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	3	2	50	402	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Emergency Generator - Diesel (300 - 600 HP)											0.0000	22.9621	22.9621	3.2200e-003	0.0000	23.0426
Total											**0.0000**	**22.9621**	**22.9621**	**3.2200e-003**	**0.0000**	**23.0426**

11.0 Vegetation

Balboa Reservoir-Mitigated Developer Option Construction

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	10.00	1000sqft	0.00	10,000.00	0
Enclosed Parking with Elevator	1,300.00	Space	0.00	339,900.00	0
Other Asphalt Surfaces	4.00	Acre	4.00	174,240.00	0
City Park	4.00	Acre	4.00	174,240.00	0
Apartments Mid Rise	1,100.00	Dwelling Unit	13.00	1,283,000.00	3146
Strip Mall	7.50	1000sqft	0.00	7,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Specific Information

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	8,750.00	0.00

tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	8,750.00	3,750.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	8,750.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	8,750.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	8,750.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	8,750.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	8,750.00	5,000.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	26,250.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	26,250.00	11,250.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	26,250.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	26,250.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	26,250.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	26,250.00	0.00
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tblArchitecturalCoating	ConstArea_Parking	30,848.00	0.00
tblArchitecturalCoating	ConstArea_Parking	30,848.00	0.00
tblArchitecturalCoating	ConstArea_Parking	30,848.00	0.00
tblArchitecturalCoating	ConstArea_Parking	30,848.00	0.00
tblArchitecturalCoating	ConstArea_Parking	30,848.00	0.00
tblArchitecturalCoating	ConstArea_Parking	30,848.00	0.00
tblArchitecturalCoating	ConstArea_Parking	30,848.00	20,394.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	866,025.00	83,700.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	866,025.00	189,675.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	866,025.00	65,137.50
tblArchitecturalCoating	ConstArea_Residential_Exterior	866,025.00	120,150.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	866,025.00	291,600.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	866,025.00	65,137.50
tblArchitecturalCoating	ConstArea_Residential_Exterior	866,025.00	50,625.00
tblArchitecturalCoating	ConstArea_Residential_Interior	2,598,075.00	251,100.00
tblArchitecturalCoating	ConstArea_Residential_Interior	2,598,075.00	569,025.00
tblArchitecturalCoating	ConstArea_Residential_Interior	2,598,075.00	195,412.50

tblArchitecturalCoating	ConstArea_Residential_Interior	2,598,075.00	360,450.00
tblArchitecturalCoating	ConstArea_Residential_Interior	2,598,075.00	874,800.00
tblArchitecturalCoating	ConstArea_Residential_Interior	2,598,075.00	195,412.50
tblArchitecturalCoating	ConstArea_Residential_Interior	2,598,075.00	151,875.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Parking	150.00	10.00
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tblArchitecturalCoating	EF_Residential_Exterior	150.00	10.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	10.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	10.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	10.00

tblArchitecturalCoating	EF_Residential_Exterior	150.00	10.00
tblArchitecturalCoating	EF_Residential_Exterior	150.00	10.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	10.00
tblArchitecturalCoating	EF_Residential_Interior	100.00	10.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	15.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	12.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	11.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
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tblConstructionPhase	NumDays	20.00	152.00
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tblConstructionPhase	NumDays	370.00	109.00
tblConstructionPhase	NumDays	370.00	131.00
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tblConstructionPhase	NumDays	370.00	45.00
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tblConstructionPhase	NumDays	370.00	151.00
tblConstructionPhase	NumDays	370.00	479.00

tblConstructionPhase	NumDays	370.00	283.00
tblConstructionPhase	NumDays	370.00	154.00
tblConstructionPhase	NumDays	370.00	154.00
tblConstructionPhase	NumDays	370.00	132.00
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tblConstructionPhase	NumDays	370.00	153.00
tblConstructionPhase	NumDays	35.00	220.00
tblConstructionPhase	NumDays	10.00	65.00
tblConstructionPhase	NumDays	10.00	173.00
tblConstructionPhase	NumDaysWeek	5.00	6.00
tblLandUse	LandUseSquareFeet	520,000.00	339,900.00
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tblLandUse	LotAcreage	11.70	0.00
tblLandUse	LotAcreage	28.95	13.00
tblLandUse	LotAcreage	0.17	0.00
tblOffRoadEquipment	HorsePower	158.00	325.00
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tblOffRoadEquipment	HorsePower	97.00	250.00
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tblOffRoadEquipment	HorsePower	212.00	400.00
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tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50

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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
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tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00

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tblOffRoadEquipment	UsageHours	8.00	7.20
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tblOffRoadEquipment	UsageHours	7.00	2.29
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tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	22.00
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tblTripsAndVMT	HaulingTripNumber	0.00	9,500.00
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tblTripsAndVMT	VendorTripNumber	233.00	82.00
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tblTripsAndVMT	VendorTripNumber	233.00	58.00
tblTripsAndVMT	VendorTripNumber	233.00	90.00
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tblTripsAndVMT	VendorTripNumber	233.00	90.00
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tblTripsAndVMT	VendorTripNumber	233.00	82.00

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tblTripsAndVMT	WorkerTripNumber	1,088.00	112.00
tblTripsAndVMT	WorkerTripNumber	218.00	174.00
tblTripsAndVMT	WorkerTripNumber	1,088.00	174.00
tblTripsAndVMT	WorkerTripNumber	218.00	112.00
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tblTripsAndVMT	WorkerTripNumber	1,088.00	174.00
tblTripsAndVMT	WorkerTripNumber	218.00	162.00
tblTripsAndVMT	WorkerTripNumber	218.00	254.00
tblTripsAndVMT	WorkerTripNumber	3.00	0.00
tblTripsAndVMT	WorkerTripNumber	218.00	174.00
tblTripsAndVMT	WorkerTripNumber	1,088.00	174.00
tblTripsAndVMT	WorkerTripNumber	1,088.00	174.00
tblTripsAndVMT	WorkerTripNumber	1,088.00	0.00
tblTripsAndVMT	WorkerTripNumber	1,088.00	390.00
tblTripsAndVMT	WorkerTripNumber	1,088.00	194.00
tblTripsAndVMT	WorkerTripNumber	1,088.00	390.00
tblTripsAndVMT	WorkerTripNumber	1,088.00	194.00
tblTripsAndVMT	WorkerTripNumber	218.00	194.00
tblTripsAndVMT	WorkerTripNumber	218.00	390.00
tblTripsAndVMT	WorkerTripNumber	15.00	20.00
tblTripsAndVMT	WorkerTripNumber	8.00	20.00
tblTripsAndVMT	WorkerTripNumber	1,088.00	254.00
tblTripsAndVMT	WorkerTripNumber	1,088.00	112.00
tblTripsAndVMT	WorkerTripNumber	1,088.00	162.00
tblTripsAndVMT	WorkerTripNumber	1,088.00	174.00

tblTripsAndVMT	WorkerTripNumber	1,088.00	174.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.9204	9.6554	6.2144	0.0181	0.2367	0.3687	0.6053	0.0355	0.3401	0.3756	0.0000	1,598.9047	1,598.9047	0.4748	0.0000	1,610.7750
2022	0.8695	9.1024	7.8020	0.0281	0.9834	0.2159	1.1993	0.2567	0.2063	0.4630	0.0000	2,635.2558	2,635.2558	0.3868	0.0000	2,644.9260
2023	0.7507	6.9464	5.3844	0.0246	1.1255	0.1242	1.2497	0.3063	0.1160	0.4223	0.0000	2,358.5162	2,358.5162	0.2999	0.0000	2,366.0139
2024	1.1230	7.8159	7.6672	0.0305	1.3194	0.1455	1.4648	0.3576	0.1393	0.4969	0.0000	2,940.7004	2,940.7004	0.3813	0.0000	2,950.2335
2025	0.5804	5.8892	4.9401	0.0212	0.8970	0.1163	1.0133	0.2442	0.1095	0.3538	0.0000	2,024.0866	2,024.0866	0.2717	0.0000	2,030.8799
2026	0.7888	4.6528	4.1726	0.0181	0.9987	0.0973	1.0959	0.2702	0.0915	0.3617	0.0000	1,728.6354	1,728.6354	0.1985	0.0000	1,733.5970
2027	0.0676	0.3279	0.3159	1.3300e-003	0.0784	7.0600e-003	0.0855	0.0212	6.6800e-003	0.0279	0.0000	127.0299	127.0299	0.0138	0.0000	127.3748
Maximum	**1.1230**	**9.6554**	**7.8020**	**0.0305**	**1.3194**	**0.3687**	**1.4648**	**0.3576**	**0.3401**	**0.4969**	**0.0000**	**2,940.7004**	**2,940.7004**	**0.4748**	**0.0000**	**2,950.2335**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.2577	2.1197	8.4002	0.0181	0.2367	0.0288	0.2654	0.0355	0.0287	0.0642	0.0000	1,598.9029	1,598.9029	0.4748	0.0000	1,610.7731

2022	0.5526	7.6591	9.1491	0.0281	0.9834	0.0421	1.0255	0.2567	0.0413	0.2980	0.0000	2,563.7730	2,563.7730	0.3637	0.0000	2,572.8653
2023	0.5246	5.0159	4.7725	0.0246	1.1255	0.0178	1.1433	0.3063	0.0171	0.3233	0.0000	2,097.7601	2,097.7601	0.2156	0.0000	2,103.1494
2024	0.8839	6.9366	7.9509	0.0305	1.3194	0.0316	1.3510	0.3576	0.0307	0.3883	0.0000	2,800.8414	2,800.8414	0.3361	0.0000	2,809.2437
2025	0.3567	4.4581	4.5850	0.0212	0.8970	0.0197	0.9167	0.2442	0.0191	0.2633	0.0000	1,774.4091	1,774.4091	0.1910	0.0000	1,779.1836
2026	0.5853	3.1003	3.3542	0.0181	0.9987	0.0109	1.0096	0.2702	0.0103	0.2804	0.0000	1,486.5625	1,486.5625	0.1202	0.0000	1,489.5668
2027	0.0529	0.2245	0.2621	1.3300e-003	0.0784	8.3000e-004	0.0793	0.0212	7.8000e-004	0.0220	0.0000	111.0607	111.0607	8.6300e-003	0.0000	111.2765
Maximum	**0.8839**	**7.6591**	**9.1491**	**0.0305**	**1.3194**	**0.0421**	**1.3510**	**0.3576**	**0.0413**	**0.3883**	**0.0000**	**2,800.8414**	**2,800.8414**	**0.4748**	**0.0000**	**2,809.2437**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**36.99**	**33.51**	**-5.42**	**0.00**	**0.00**	**85.89**	**13.75**	**0.00**	**85.34**	**34.44**	**0.00**	**7.30**	**7.30**	**15.64**	**0.00**	**7.34**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**3-1-2021**	**5-31-2021**	2.2557	0.5246
2	**6-1-2021**	**8-31-2021**	3.3783	0.7513
3	**9-1-2021**	**11-30-2021**	3.6439	0.8120
4	**12-1-2021**	**2-28-2022**	2.1313	0.5356
5	**3-1-2022**	**5-31-2022**	2.9256	2.7080
6	**6-1-2022**	**8-31-2022**	2.8227	2.6317
7	**9-1-2022**	**11-30-2022**	2.4875	1.9636
8	**12-1-2022**	**2-28-2023**	2.1779	1.6009
9	**3-1-2023**	**5-31-2023**	2.1598	1.5957
10	**6-1-2023**	**8-31-2023**	1.9347	1.3596
11	**9-1-2023**	**11-30-2023**	1.7000	1.1734
12	**12-1-2023**	**2-29-2024**	1.7378	1.3480
13	**3-1-2024**	**5-31-2024**	1.9927	1.5823
14	**6-1-2024**	**8-31-2024**	1.8428	1.4186
15	**9-1-2024**	**11-30-2024**	3.1712	3.1501
16	**12-1-2024**	**2-28-2025**	1.9666	2.0148

17	**3-1-2025**	**5-31-2025**	1.6276	1.2752
18	**6-1-2025**	**8-31-2025**	1.4528	0.8810
19	**9-1-2025**	**11-30-2025**	1.5589	0.9816
20	**12-1-2025**	**2-28-2026**	1.5849	1.0082
21	**3-1-2026**	**5-31-2026**	1.4815	0.9660
22	**6-1-2026**	**8-31-2026**	1.2455	0.8759
23	**9-1-2026**	**11-30-2026**	1.2443	0.8786
24	**12-1-2026**	**2-28-2027**	0.8457	0.5966
		Highest	3.6439	3.1501

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.8216	0.1526	11.6713	7.3900e-003		0.5450	0.5450		0.5450	0.5450	50.1487	33.9638	84.1125	0.0935	3.2900e-003	87.4291
Energy	0.0529	0.4523	0.1965	2.8800e-003		0.0365	0.0365		0.0365	0.0365	0.0000	2,489.3794	2,489.3794	0.0989	0.0280	2,500.1924
Mobile	1.7064	6.6091	18.8178	0.0711	6.6104	0.0753	6.6857	1.7802	0.0704	1.8506	0.0000	6,548.0841	6,548.0841	0.2712	0.0000	6,554.8628
Waste						0.0000	0.0000		0.0000	0.0000	107.0209	0.0000	107.0209	6.3248	0.0000	265.1397
Water						0.0000	0.0000		0.0000	0.0000	23.0497	166.6931	189.7428	2.3750	0.0575	266.2399
Total	**10.5809**	**7.2140**	**30.6856**	**0.0813**	**6.6104**	**0.6568**	**7.2672**	**1.7802**	**0.6519**	**2.4321**	**180.2193**	**9,238.1205**	**9,418.3398**	**9.1633**	**0.0887**	**9,673.8639**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.8216	0.1526	11.6713	7.3900e-003		0.5450	0.5450		0.5450	0.5450	50.1487	33.9638	84.1125	0.0935	3.2900e-003	87.4291
Energy	0.0529	0.4523	0.1965	2.8800e-003		0.0365	0.0365		0.0365	0.0365	0.0000	2,489.3794	2,489.3794	0.0989	0.0280	2,500.1924
Mobile	1.7064	6.6091	18.8178	0.0711	6.6104	0.0753	6.6857	1.7802	0.0704	1.8506	0.0000	6,548.0841	6,548.0841	0.2712	0.0000	6,554.8628
Waste						0.0000	0.0000		0.0000	0.0000	107.0209	0.0000	107.0209	6.3248	0.0000	265.1397
Water						0.0000	0.0000		0.0000	0.0000	23.0497	166.6931	189.7428	2.3750	0.0575	266.2399
Total	**10.5809**	**7.2140**	**30.6856**	**0.0813**	**6.6104**	**0.6568**	**7.2672**	**1.7802**	**0.6519**	**2.4321**	**180.2193**	**9,238.1205**	**9,418.3398**	**9.1633**	**0.0887**	**9,673.8639**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Phase 0-Demolition/Excavation/Grading	Grading	3/1/2021	12/31/2021	5	220	11
2	Phase 0-Recycling Plant	Site Preparation	5/1/2021	7/31/2021	5	65	12
3	Phase 0-Utilities/Drainage/Subgrade	Site Preparation	7/1/2021	2/28/2022	5	173	13
4	Phase 0-Roadway Lift	Paving	2/1/2022	2/28/2022	5	20	14
5	Phase 1-C,D (HD Equipment Mix)	Building Construction	3/1/2022	9/30/2022	5	154	15
6	Phase 1-E (HD Equipment Mix)	Building Construction	3/1/2022	9/30/2022	5	154	18
7	Phase 1-F (HD Equipment Mix)	Building Construction	3/1/2022	8/31/2022	5	132	21
8	Phase 1-TH (HD Equipment Mix1)	Building Construction	3/1/2022	6/30/2022	5	88	24
9	Phase 1-TH (Compressors/Gradeall)	Building Construction	7/1/2022	1/31/2023	5	153	25
10	Phase 1-F (Electric Cranes Only)	Building Construction	9/1/2022	8/31/2024	5	522	22
11	Phase 1-C,D (Electric Cranes Only)	Building Construction	10/1/2022	8/31/2024	5	500	16

12	Phase 1-E (Electric Cranes Only)	Building Construction	10/1/2022	10/31/2023	5	282	19
13	Phase 1-TH Architectural Coatings1	Architectural Coating	10/1/2022	4/30/2023	5	150	31
14	Phase 1-TH (HD Equipment Mix2)	Building Construction	2/1/2023	6/30/2023	5	108	26
15	Phase 1-E Architectural Coatings	Architectural Coating	4/1/2023	10/31/2023	5	152	20
16	Phase 1-TH (No HD Equipment1)	Building Construction	7/1/2023	11/30/2023	5	109	27
17	Phase 1-TH (Gradealls Only)	Building Construction	12/1/2023	5/31/2024	5	131	28
18	Phase 1-F Architectural Coatings	Architectural Coating	1/1/2024	8/31/2024	5	175	23
19	Phase 1-C,D Architectural Coatings	Architectural Coating	2/1/2024	8/31/2024	5	152	17
20	Phase 1-TH Architectural Coatings2	Architectural Coating	2/1/2024	8/31/2024	5	152	32
21	Phase 1-TH (Excavator/BobCats Only)	Building Construction	6/1/2024	6/30/2024	5	20	29
22	Phase 1-TH (No HD Equipment2)	Building Construction	7/1/2024	8/31/2024	5	45	30
23	Phase 2-Material Off-Haul (No HD Equipment)	Building Construction	9/1/2024	10/25/2024	6	47	33
24	Phase 2-G,A,H (HD Equipment Mix)	Building Construction	9/1/2024	3/31/2025	5	151	34
25	Phase 2-B/Parking Structure (HD Equipment Mix)	Building Construction	9/1/2024	3/31/2025	5	151	37
26	Phase 2-G,A,H (Electric Cranes Only)	Building Construction	4/1/2025	1/31/2027	5	479	35
27	Phase 2-B/Parking Structure (Electric Cranes Only)	Building Construction	4/1/2025	4/30/2026	5	283	38
28	Phase 2-B/Parking Structure Architectural Coatings	Architectural Coating	10/1/2025	4/30/2026	5	152	39
29	Phase 2-G,A,H Architectural Coatings	Architectural Coating	5/1/2026	1/31/2027	5	196	36

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4

Residential Indoor: 569,025; Residential Outdoor: 189,675; Non-Residential Indoor: 11,250; Non-Residential Outdoor: 3,750; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Phase 0-Demolition/Excavation/Grading	Excavators	2	7.20	325	0.50
Phase 0-Demolition/Excavation/Grading	Other Construction Equipment	1	3.20	350	0.50
Phase 0-Demolition/Excavation/Grading	Graders	1	7.20	330	0.50
Phase 0-Demolition/Excavation/Grading	Plate Compactors	2	7.20	8	0.43

Phase 0-Demolition/Excavation/Grading	Crawler Tractors	1	7.20	400	1.00
Phase 0-Demolition/Excavation/Grading	Crawler Tractors	1	7.20	400	1.00
Phase 0-Recycling Plant	Crushing/Proc. Equipment	1	8.00	350	0.78
Phase 0-Utilities/Drainage/Subgrade	Crawler Tractors	2	6.00	400	1.00
Phase 0-Utilities/Drainage/Subgrade	Excavators	2	8.00	250	0.50
Phase 0-Utilities/Drainage/Subgrade	Plate Compactors	2	6.00	8	0.43
Phase 0-Roadway Lift	Paving Equipment	1	8.00	132	0.36
Phase 0-Roadway Lift	Pavers	1	8.00	130	0.42
Phase 0-Roadway Lift	Rollers	1	8.00	80	0.38
Phase 1-C,D (HD Equipment Mix)	Excavators	2	4.57	325	0.50
Phase 1-C,D (HD Equipment Mix)	Plate Compactors	2	2.29	8	0.43
Phase 1-C,D (HD Equipment Mix)	Skid Steer Loaders	2	5.71	65	0.37
Phase 1-C,D (HD Equipment Mix)	Tractors/Loaders/Backhoes	2	3.43	250	0.25
Phase 1-C,D (HD Equipment Mix)	Air Compressors	2	8.00	78	0.48
Phase 1-C,D (HD Equipment Mix)	Generator Sets	2	8.00	84	0.74
Phase 1-C,D (Electric Cranes Only)	Cranes	2	8.00	231	0.29
Phase 1-C,D Architectural Coatings	Air Compressors	2	8.00	78	0.48
Phase 1-E (HD Equipment Mix)	Excavators	1	4.57	325	0.50
Phase 1-E (HD Equipment Mix)	Plate Compactors	1	3.43	8	0.43
Phase 1-E (HD Equipment Mix)	Skid Steer Loaders	1	6.86	65	0.37
Phase 1-E (HD Equipment Mix)	Tractors/Loaders/Backhoes	1	2.29	250	0.25
Phase 1-E (HD Equipment Mix)	Air Compressors	1	8.00	78	0.48
Phase 1-E (HD Equipment Mix)	Generator Sets	1	8.00	84	0.74
Phase 1-E (Electric Cranes Only)	Cranes	1	8.00	231	0.29
Phase 1-E Architectural Coatings	Air Compressors	1	8.00	78	0.48
Phase 1-F (HD Equipment Mix)	Excavators	1	4.00	325	0.50
Phase 1-F (HD Equipment Mix)	Plate Compactors	1	2.67	8	0.43
Phase 1-F (HD Equipment Mix)	Skid Steer Loaders	1	6.67	65	0.37
Phase 1-F (HD Equipment Mix)	Tractors/Loaders/Backhoes	1	2.67	250	0.25
Phase 1-F (HD Equipment Mix)	Generator Sets	1	8.00	84	0.74

Phase 1-F (Electric Cranes Only)	Cranes	1	8.00	231	0.29
Phase 1-F Architectural Coatings	Air Compressors	1	8.00	78	0.48
Phase 1-TH (HD Equipment Mix1)	Excavators	1	8.00	325	0.50
Phase 1-TH (HD Equipment Mix1)	Plate Compactors	1	8.00	8	0.43
Phase 1-TH (HD Equipment Mix1)	Skid Steer Loaders	1	8.00	65	0.37
Phase 1-TH (HD Equipment Mix1)	Tractors/Loaders/Backhoes	1	8.00	250	0.25
Phase 1-TH (HD Equipment Mix1)	Air Compressors	1	8.00	78	0.48
Phase 1-TH (HD Equipment Mix1)	Generator Sets	1	8.00	84	0.74
Phase 1-TH (Compressors/Gradeall)	Air Compressors	1	6.86	78	0.48
Phase 1-TH (Compressors/Gradeall)	Rough Terrain Forklifts	4	8.00	100	0.40
Phase 1-TH (HD Equipment Mix2)	Excavators	1	8.00	325	0.50
Phase 1-TH (HD Equipment Mix2)	Plate Compactors	1	6.40	8	0.43
Phase 1-TH (HD Equipment Mix2)	Skid Steer Loaders	1	8.00	65	0.37
Phase 1-TH (HD Equipment Mix2)	Tractors/Loaders/Backhoes	1	6.40	250	0.25
Phase 1-TH (HD Equipment Mix2)	Generator Sets	1	8.00	84	0.74
Phase 1-TH (No HD Equipment1)	Aerial Lifts	1	8.00	63	0.31
Phase 1-TH (Gradealls Only)	Rough Terrain Forklifts	4	8.00	100	0.40
Phase 1-TH (Excavator/BobCats Only)	Excavators	1	8.00	325	0.50
Phase 1-TH (Excavator/BobCats Only)	Skid Steer Loaders	1	8.00	65	0.37
Phase 1-TH (No HD Equipment2)	Aerial Lifts	1	8.00	63	0.31
Phase 1-TH Architectural Coatings1	Air Compressors	1	8.00	78	0.48
Phase 1-TH Architectural Coatings2	Air Compressors	1	8.00	78	0.48
Phase 2-Material Off-Haul (No HD Equipment)	Aerial Lifts	1	8.00	63	0.31
Phase 2-G,A,H (HD Equipment Mix)	Excavators	3	3.43	325	0.50
Phase 2-G,A,H (HD Equipment Mix)	Plate Compactors	3	2.29	8	0.43
Phase 2-G,A,H (HD Equipment Mix)	Skid Steer Loaders	3	5.71	65	0.37
Phase 2-G,A,H (HD Equipment Mix)	Tractors/Loaders/Backhoes	3	2.29	250	0.25
Phase 2-G,A,H (HD Equipment Mix)	Air Compressors	3	6.86	78	0.48
Phase 2-G,A,H (HD Equipment Mix)	Generator Sets	3	8.00	84	0.74
Phase 2-G,A,H (Electric Cranes Only)	Cranes	3	8.00	231	0.29

Phase 2-G,A,H Architectural Coatings	Air Compressors	3	8.00	78	0.48
Phase 2-B/Parking Structure (HD Equipment Mix)	Excavators	2	4.57	325	0.50
Phase 2-B/Parking Structure (HD Equipment Mix)	Plate Compactors	2	3.43	8	0.43
Phase 2-B/Parking Structure (HD Equipment Mix)	Skid Steer Loaders	2	6.86	65	0.37
Phase 2-B/Parking Structure (HD Equipment Mix)	Tractors/Loaders/Backhoes	2	2.29	250	0.25
Phase 2-B/Parking Structure (HD Equipment Mix)	Air Compressors	2	6.86	78	0.48
Phase 2-B/Parking Structure (HD Equipment Mix)	Generator Sets	2	8.00	84	0.74
Phase 2-B/Parking Structure (Electric Cranes Only)	Cranes	2	8.00	231	0.29
Phase 2-B/Parking Structure Architectural Coatings	Air Compressors	2	8.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Phase 0-Demolition/Excavation/Gra	8	60.00	0.00	34.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 0-Recycling Plant	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 0-Utilities/Drainage/Subgrade	6	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 0-Roadway Lift	3	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-C,D (HD Equipment Mix)	12	254.00	130.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-C,D (Electric Cranes Only)	2	254.00	130.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-C,D Architectural Coatings	2	254.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-E (HD Equipment Mix)	6	112.00	58.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-E (Electric Cranes Only)	1	112.00	58.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-E Architectural Coatings	1	112.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-F (HD Equipment Mix)	5	162.00	82.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-F (Electric Cranes Only)	1	162.00	82.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-F Architectural Coatings	1	162.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-TH (HD Equipment Mix1)	6	174.00	90.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-TH (Compressors/Gradeall)	5	174.00	90.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-TH (HD Equipment Mix2)	5	174.00	90.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-TH (No HD Equipment1)	1	174.00	90.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Phase 1-TH (Gradealls Only)	4	174.00	90.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-TH (Excavator/BobCats Only)	2	174.00	90.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-TH (No HD Equipment2)	1	174.00	90.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-TH Architectural Coatings1	1	174.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-TH Architectural Coatings2	1	174.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2-Material Off-Haul (No HD Equipment)	1	0.00	0.00	9,500.00	10.80	7.30	22.00	LD_Mix	HDT_Mix	HHDT
Phase 2-G,A,H (HD Equipment Mix)	18	390.00	200.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2-G,A,H (Electric Cranes Only)	3	390.00	200.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2-G,A,H Architectural Coatings	3	390.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2-B/Parking Structure (HD Equipment	12	194.00	86.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2-B/Parking Structure (Electric Cranes	2	194.00	86.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2-B/Parking Structure Architectural	2	194.00	0.00	34.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

3.2 Phase 0-Demolition/Excavation/Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1050	0.0000	0.1050	0.0113	0.0000	0.0113	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.6067	6.5797	4.1245	0.0118		0.2533	0.2533		0.2332	0.2332	0.0000	1,031.0993	1,031.0993	0.3321	0.0000	1,039.4023
Total	**0.6067**	**6.5797**	**4.1245**	**0.0118**	**0.1050**	**0.2533**	**0.3583**	**0.0113**	**0.2332**	**0.2445**	**0.0000**	**1,031.0993**	**1,031.0993**	**0.3321**	**0.0000**	**1,039.4023**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-004	5.4900e-003	1.8000e-003	1.0000e-005	2.9000e-004	2.0000e-005	3.0000e-004	8.0000e-005	2.0000e-005	9.0000e-005	0.0000	1.4917	1.4917	2.7000e-004	0.0000	1.4986
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0188	0.0120	0.1372	5.3000e-004	0.0522	3.9000e-004	0.0526	0.0139	3.6000e-004	0.0142	0.0000	47.7955	47.7955	9.8000e-004	0.0000	47.8199
Total	**0.0189**	**0.0175**	**0.1390**	**5.4000e-004**	**0.0524**	**4.1000e-004**	**0.0529**	**0.0140**	**3.8000e-004**	**0.0143**	**0.0000**	**49.2872**	**49.2872**	**1.2500e-003**	**0.0000**	**49.3185**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1050	0.0000	0.1050	0.0113	0.0000	0.0113	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1604	1.5022	5.5963	0.0118		0.0191	0.0191		0.0191	0.0191	0.0000	1,031.0981	1,031.0981	0.3321	0.0000	1,039.4011
Total	**0.1604**	**1.5022**	**5.5963**	**0.0118**	**0.1050**	**0.0191**	**0.1241**	**0.0113**	**0.0191**	**0.0305**	**0.0000**	**1,031.0981**	**1,031.0981**	**0.3321**	**0.0000**	**1,039.4011**

Mitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	1.3000e-004	5.4900e-003	1.8000e-003	1.0000e-005	2.9000e-004	2.0000e-005	3.0000e-004	8.0000e-005	2.0000e-005	9.0000e-005	0.0000	1.4917	1.4917	2.7000e-004	0.0000	1.4986
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0188	0.0120	0.1372	5.3000e-004	0.0522	3.9000e-004	0.0526	0.0139	3.6000e-004	0.0142	0.0000	47.7955	47.7955	9.8000e-004	0.0000	47.8199
Total	**0.0189**	**0.0175**	**0.1390**	**5.4000e-004**	**0.0524**	**4.1000e-004**	**0.0529**	**0.0140**	**3.8000e-004**	**0.0143**	**0.0000**	**49.2872**	**49.2872**	**1.2500e-003**	**0.0000**	**49.3185**

3.3 Phase 0-Recycling Plant - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0419	0.2463	0.1678	7.8000e-004		8.6100e-003	8.6100e-003		8.6100e-003	8.6100e-003	0.0000	80.6759	80.6759	3.4100e-003	0.0000	80.7610
Total	**0.0419**	**0.2463**	**0.1678**	**7.8000e-004**	**0.0000**	**8.6100e-003**	**8.6100e-003**	**0.0000**	**8.6100e-003**	**8.6100e-003**	**0.0000**	**80.6759**	**80.6759**	**3.4100e-003**	**0.0000**	**80.7610**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3900e-003	0.0407	0.3443	7.8000e-004		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003	0.0000	80.6758	80.6758	3.4100e-003	0.0000	80.7610
Total	**9.3900e-003**	**0.0407**	**0.3443**	**7.8000e-004**	**0.0000**	**1.2500e-003**	**1.2500e-003**	**0.0000**	**1.2500e-003**	**1.2500e-003**	**0.0000**	**80.6758**	**80.6758**	**3.4100e-003**	**0.0000**	**80.7610**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Phase 0-Utilities/Drainage/Subgrade - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0688	0.0000	0.0688	7.4300e-003	0.0000	7.4300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2492	2.8095	1.7557	4.8900e-003		0.1063	0.1063		0.0978	0.0978	0.0000	428.2833	428.2833	0.1378	0.0000	431.7292
Total	**0.2492**	**2.8095**	**1.7557**	**4.8900e-003**	**0.0688**	**0.1063**	**0.1751**	**7.4300e-003**	**0.0978**	**0.1053**	**0.0000**	**428.2833**	**428.2833**	**0.1378**	**0.0000**	**431.7292**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7600e-003	2.4000e-003	0.0274	1.1000e-004	0.0104	8.0000e-005	0.0105	2.7700e-003	7.0000e-005	2.8500e-003	0.0000	9.5591	9.5591	2.0000e-004	0.0000	9.5640
Total	**3.7600e-003**	**2.4000e-003**	**0.0274**	**1.1000e-004**	**0.0104**	**8.0000e-005**	**0.0105**	**2.7700e-003**	**7.0000e-005**	**2.8500e-003**	**0.0000**	**9.5591**	**9.5591**	**2.0000e-004**	**0.0000**	**9.5640**

Mitigated Construction On-Site

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

Fugitive Dust					0.0688	0.0000	0.0688	7.4300e-003	0.0000	7.4300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0652	0.5570	2.2932	4.8900e-003		7.9200e-003	7.9200e-003		7.9200e-003	7.9200e-003	0.0000	428.2828	428.2828	0.1378	0.0000	431.7286
Total	**0.0652**	**0.5570**	**2.2932**	**4.8900e-003**	**0.0688**	**7.9200e-003**	**0.0767**	**7.4300e-003**	**7.9200e-003**	**0.0154**	**0.0000**	**428.2828**	**428.2828**	**0.1378**	**0.0000**	**431.7286**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7600e-003	2.4000e-003	0.0274	1.1000e-004	0.0104	8.0000e-005	0.0105	2.7700e-003	7.0000e-005	2.8500e-003	0.0000	9.5591	9.5591	2.0000e-004	0.0000	9.5640
Total	**3.7600e-003**	**2.4000e-003**	**0.0274**	**1.1000e-004**	**0.0104**	**8.0000e-005**	**0.0105**	**2.7700e-003**	**7.0000e-005**	**2.8500e-003**	**0.0000**	**9.5591**	**9.5591**	**2.0000e-004**	**0.0000**	**9.5640**

3.4 Phase 0-Utilities/Drainage/Subgrade - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0688	0.0000	0.0688	7.4300e-003	0.0000	7.4300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0698	0.7284	0.5209	1.5200e-003		0.0283	0.0283		0.0261	0.0261	0.0000	133.0334	133.0334	0.0428	0.0000	134.1038
Total	**0.0698**	**0.7284**	**0.5209**	**1.5200e-003**	**0.0688**	**0.0283**	**0.0971**	**7.4300e-003**	**0.0261**	**0.0335**	**0.0000**	**133.0334**	**133.0334**	**0.0428**	**0.0000**	**134.1038**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-003	6.7000e-004	7.9400e-003	3.0000e-005	3.2400e-003	2.0000e-005	3.2600e-003	8.6000e-004	2.0000e-005	8.8000e-004	0.0000	2.8589	2.8589	6.0000e-005	0.0000	2.8603
Total	**1.1000e-003**	**6.7000e-004**	**7.9400e-003**	**3.0000e-005**	**3.2400e-003**	**2.0000e-005**	**3.2600e-003**	**8.6000e-004**	**2.0000e-005**	**8.8000e-004**	**0.0000**	**2.8589**	**2.8589**	**6.0000e-005**	**0.0000**	**2.8603**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0688	0.0000	0.0688	7.4300e-003	0.0000	7.4300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0203	0.1730	0.7123	1.5200e-003		2.4600e-003	2.4600e-003		2.4600e-003	2.4600e-003	0.0000	133.0332	133.0332	0.0428	0.0000	134.1036
Total	**0.0203**	**0.1730**	**0.7123**	**1.5200e-003**	**0.0688**	**2.4600e-003**	**0.0713**	**7.4300e-003**	**2.4600e-003**	**9.8900e-003**	**0.0000**	**133.0332**	**133.0332**	**0.0428**	**0.0000**	**134.1036**

Mitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-003	6.7000e-004	7.9400e-003	3.0000e-005	3.2400e-003	2.0000e-005	3.2600e-003	8.6000e-004	2.0000e-005	8.8000e-004	0.0000	2.8589	2.8589	6.0000e-005	0.0000	2.8603
Total	**1.1000e-003**	**6.7000e-004**	**7.9400e-003**	**3.0000e-005**	**3.2400e-003**	**2.0000e-005**	**3.2600e-003**	**8.6000e-004**	**2.0000e-005**	**8.8000e-004**	**0.0000**	**2.8589**	**2.8589**	**6.0000e-005**	**0.0000**	**2.8603**

3.5 Phase 0-Roadway Lift - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.5100e-003	0.0556	0.0729	1.1000e-004		2.8400e-003	2.8400e-003		2.6100e-003	2.6100e-003	0.0000	10.0138	10.0138	3.2400e-003	0.0000	10.0948
Paving	5.2400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0108**	**0.0556**	**0.0729**	**1.1000e-004**		**2.8400e-003**	**2.8400e-003**		**2.6100e-003**	**2.6100e-003**	**0.0000**	**10.0138**	**10.0138**	**3.2400e-003**	**0.0000**	**10.0948**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	3.3000e-004	3.8800e-003	2.0000e-005	1.5800e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.3946	1.3946	3.0000e-005	0.0000	1.3952

Total	**5.4000e-004**	**3.3000e-004**	**3.8800e-003**	**2.0000e-005**	**1.5800e-003**	**1.0000e-005**	**1.5900e-003**	**4.2000e-004**	**1.0000e-005**	**4.3000e-004**	**0.0000**	**1.3946**	**1.3946**	**3.0000e-005**	**0.0000**	**1.3952**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6700e-003	0.0502	0.0865	1.1000e-004		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	10.0138	10.0138	3.2400e-003	0.0000	10.0947
Paving	5.2400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.9100e-003**	**0.0502**	**0.0865**	**1.1000e-004**		**1.9000e-004**	**1.9000e-004**		**1.9000e-004**	**1.9000e-004**	**0.0000**	**10.0138**	**10.0138**	**3.2400e-003**	**0.0000**	**10.0947**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	3.3000e-004	3.8800e-003	2.0000e-005	1.5800e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.3946	1.3946	3.0000e-005	0.0000	1.3952
Total	**5.4000e-004**	**3.3000e-004**	**3.8800e-003**	**2.0000e-005**	**1.5800e-003**	**1.0000e-005**	**1.5900e-003**	**4.2000e-004**	**1.0000e-005**	**4.3000e-004**	**0.0000**	**1.3946**	**1.3946**	**3.0000e-005**	**0.0000**	**1.3952**

3.6 Phase 1-C,D (HD Equipment Mix) - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1481	1.2570	1.4526	3.4500e-003		0.0573	0.0573		0.0559	0.0559	0.0000	299.3401	299.3401	0.0590	0.0000	300.8139
Total	**0.1481**	**1.2570**	**1.4526**	**3.4500e-003**		**0.0573**	**0.0573**		**0.0559**	**0.0559**	**0.0000**	**299.3401**	**299.3401**	**0.0590**	**0.0000**	**300.8139**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0286	1.0865	0.3438	2.6200e-003	0.0654	2.2800e-003	0.0677	0.0189	2.1800e-003	0.0211	0.0000	269.9502	269.9502	0.0358	0.0000	270.8453
Worker	0.0525	0.0321	0.3789	1.5100e-003	0.1545	1.1500e-003	0.1557	0.0411	1.0600e-003	0.0422	0.0000	136.3750	136.3750	2.6300e-003	0.0000	136.4407
Total	**0.0811**	**1.1186**	**0.7227**	**4.1300e-003**	**0.2200**	**3.4300e-003**	**0.2234**	**0.0600**	**3.2400e-003**	**0.0633**	**0.0000**	**406.3253**	**406.3253**	**0.0384**	**0.0000**	**407.2861**

Mitigated Construction On-Site

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

Off-Road	0.0614	1.1260	2.0185	3.4500e-003		9.9900e-003	9.9900e-003		9.9900e-003	9.9900e-003	0.0000	299.3397	299.3397	0.0590	0.0000	300.8135
Total	**0.0614**	**1.1260**	**2.0185**	**3.4500e-003**		**9.9900e-003**	**9.9900e-003**		**9.9900e-003**	**9.9900e-003**	**0.0000**	**299.3397**	**299.3397**	**0.0590**	**0.0000**	**300.8135**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0286	1.0865	0.3438	2.6200e-003	0.0654	2.2800e-003	0.0677	0.0189	2.1800e-003	0.0211	0.0000	269.9502	269.9502	0.0358	0.0000	270.8453
Worker	0.0525	0.0321	0.3789	1.5100e-003	0.1545	1.1500e-003	0.1557	0.0411	1.0600e-003	0.0422	0.0000	136.3750	136.3750	2.6300e-003	0.0000	136.4407
Total	**0.0811**	**1.1186**	**0.7227**	**4.1300e-003**	**0.2200**	**3.4300e-003**	**0.2234**	**0.0600**	**3.2400e-003**	**0.0633**	**0.0000**	**406.3253**	**406.3253**	**0.0384**	**0.0000**	**407.2861**

3.7 Phase 1-E (HD Equipment Mix) - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0730	0.6179	0.7298	1.6900e-003		0.0283	0.0283		0.0277	0.0277	0.0000	146.8425	146.8425	0.0285	0.0000	147.5546
Total	**0.0730**	**0.6179**	**0.7298**	**1.6900e-003**		**0.0283**	**0.0283**		**0.0277**	**0.0277**	**0.0000**	**146.8425**	**146.8425**	**0.0285**	**0.0000**	**147.5546**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0128	0.4847	0.1534	1.1700e-003	0.0292	1.0200e-003	0.0302	8.4400e-003	9.7000e-004	9.4100e-003	0.0000	120.4393	120.4393	0.0160	0.0000	120.8387
Worker	0.0232	0.0142	0.1671	6.6000e-004	0.0682	5.1000e-004	0.0687	0.0181	4.7000e-004	0.0186	0.0000	60.1339	60.1339	1.1600e-003	0.0000	60.1628
Total	**0.0359**	**0.4989**	**0.3205**	**1.8300e-003**	**0.0973**	**1.5300e-003**	**0.0989**	**0.0266**	**1.4400e-003**	**0.0280**	**0.0000**	**180.5732**	**180.5732**	**0.0171**	**0.0000**	**181.0015**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0303	0.5601	0.9950	1.6900e-003		5.4200e-003	5.4200e-003		5.4200e-003	5.4200e-003	0.0000	146.8423	146.8423	0.0285	0.0000	147.5544
Total	**0.0303**	**0.5601**	**0.9950**	**1.6900e-003**		**5.4200e-003**	**5.4200e-003**		**5.4200e-003**	**5.4200e-003**	**0.0000**	**146.8423**	**146.8423**	**0.0285**	**0.0000**	**147.5544**

Mitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0128	0.4847	0.1534	1.1700e-003	0.0292	1.0200e-003	0.0302	8.4400e-003	9.7000e-004	9.4100e-003	0.0000	120.4393	120.4393	0.0160	0.0000	120.8387
Worker	0.0232	0.0142	0.1671	6.6000e-004	0.0682	5.1000e-004	0.0687	0.0181	4.7000e-004	0.0186	0.0000	60.1339	60.1339	1.1600e-003	0.0000	60.1628
Total	**0.0359**	**0.4989**	**0.3205**	**1.8300e-003**	**0.0973**	**1.5300e-003**	**0.0989**	**0.0266**	**1.4400e-003**	**0.0280**	**0.0000**	**180.5732**	**180.5732**	**0.0171**	**0.0000**	**181.0015**

3.8 Phase 1-F (HD Equipment Mix) - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0431	0.3953	0.4521	1.1400e-003		0.0167	0.0167		0.0162	0.0162	0.0000	98.6343	98.6343	0.0215	0.0000	99.1707
Total	**0.0431**	**0.3953**	**0.4521**	**1.1400e-003**		**0.0167**	**0.0167**		**0.0162**	**0.0162**	**0.0000**	**98.6343**	**98.6343**	**0.0215**	**0.0000**	**99.1707**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0155	0.5874	0.1859	1.4200e-003	0.0354	1.2300e-003	0.0366	0.0102	1.1800e-003	0.0114	0.0000	145.9511	145.9511	0.0194	0.0000	146.4351
Worker	0.0287	0.0176	0.2072	8.2000e-004	0.0845	6.3000e-004	0.0851	0.0225	5.8000e-004	0.0231	0.0000	74.5537	74.5537	1.4400e-003	0.0000	74.5897

Total	**0.0442**	**0.6050**	**0.3930**	**2.2400e-003**	**0.1199**	**1.8600e-003**	**0.1217**	**0.0327**	**1.7600e-003**	**0.0345**	**0.0000**	**220.5049**	**220.5049**	**0.0208**	**0.0000**	**221.0247**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0203	0.3721	0.6630	1.1400e-003		4.1400e-003	4.1400e-003		4.1400e-003	4.1400e-003	0.0000	98.6342	98.6342	0.0215	0.0000	99.1706
Total	**0.0203**	**0.3721**	**0.6630**	**1.1400e-003**		**4.1400e-003**	**4.1400e-003**		**4.1400e-003**	**4.1400e-003**	**0.0000**	**98.6342**	**98.6342**	**0.0215**	**0.0000**	**99.1706**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0155	0.5874	0.1859	1.4200e-003	0.0354	1.2300e-003	0.0366	0.0102	1.1800e-003	0.0114	0.0000	145.9511	145.9511	0.0194	0.0000	146.4351
Worker	0.0287	0.0176	0.2072	8.2000e-004	0.0845	6.3000e-004	0.0851	0.0225	5.8000e-004	0.0231	0.0000	74.5537	74.5537	1.4400e-003	0.0000	74.5897
Total	**0.0442**	**0.6050**	**0.3930**	**2.2400e-003**	**0.1199**	**1.8600e-003**	**0.1217**	**0.0327**	**1.7600e-003**	**0.0345**	**0.0000**	**220.5049**	**220.5049**	**0.0208**	**0.0000**	**221.0247**

3.9 Phase 1-TH (HD Equipment Mix1) - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0566	0.4887	0.5287	1.4200e-003		0.0209	0.0209		0.0201	0.0201	0.0000	123.6437	123.6437	0.0290	0.0000	124.3676
Total	**0.0566**	**0.4887**	**0.5287**	**1.4200e-003**		**0.0209**	**0.0209**		**0.0201**	**0.0201**	**0.0000**	**123.6437**	**123.6437**	**0.0290**	**0.0000**	**124.3676**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0113	0.4298	0.1360	1.0400e-003	0.0259	9.0000e-004	0.0268	7.4800e-003	8.6000e-004	8.3400e-003	0.0000	106.7935	106.7935	0.0142	0.0000	107.1476
Worker	0.0206	0.0126	0.1483	5.9000e-004	0.0605	4.5000e-004	0.0610	0.0161	4.1000e-004	0.0165	0.0000	53.3842	53.3842	1.0300e-003	0.0000	53.4099
Total	**0.0319**	**0.4424**	**0.2843**	**1.6300e-003**	**0.0864**	**1.3500e-003**	**0.0877**	**0.0236**	**1.2700e-003**	**0.0249**	**0.0000**	**160.1777**	**160.1777**	**0.0152**	**0.0000**	**160.5575**

Mitigated Construction On-Site

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

Off-Road	0.0247	0.4418	0.8090	1.4200e-003		4.1100e-003	4.1100e-003		4.1100e-003	4.1100e-003	0.0000	123.6435	123.6435	0.0290	0.0000	124.3674
Total	**0.0247**	**0.4418**	**0.8090**	**1.4200e-003**		**4.1100e-003**	**4.1100e-003**		**4.1100e-003**	**4.1100e-003**	**0.0000**	**123.6435**	**123.6435**	**0.0290**	**0.0000**	**124.3674**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0113	0.4298	0.1360	1.0400e-003	0.0259	9.0000e-004	0.0268	7.4800e-003	8.6000e-004	8.3400e-003	0.0000	106.7935	106.7935	0.0142	0.0000	107.1476
Worker	0.0206	0.0126	0.1483	5.9000e-004	0.0605	4.5000e-004	0.0610	0.0161	4.1000e-004	0.0165	0.0000	53.3842	53.3842	1.0300e-003	0.0000	53.4099
Total	**0.0319**	**0.4424**	**0.2843**	**1.6300e-003**	**0.0864**	**1.3500e-003**	**0.0877**	**0.0236**	**1.2700e-003**	**0.0249**	**0.0000**	**160.1777**	**160.1777**	**0.0152**	**0.0000**	**160.5575**

3.10 Phase 1-TH (Compressors/Gradeall) - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0446	0.4933	0.7353	1.1300e-003		0.0196	0.0196		0.0186	0.0186	0.0000	98.4405	98.4405	0.0269	0.0000	99.1130
Total	**0.0446**	**0.4933**	**0.7353**	**1.1300e-003**		**0.0196**	**0.0196**		**0.0186**	**0.0186**	**0.0000**	**98.4405**	**98.4405**	**0.0269**	**0.0000**	**99.1130**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0169	0.6398	0.2024	1.5400e-003	0.0385	1.3400e-003	0.0399	0.0111	1.2800e-003	0.0124	0.0000	158.9767	158.9767	0.0211	0.0000	159.5038
Worker	0.0306	0.0187	0.2208	8.8000e-004	0.0901	6.7000e-004	0.0907	0.0240	6.2000e-004	0.0246	0.0000	79.4696	79.4696	1.5300e-003	0.0000	79.5079
Total	**0.0475**	**0.6586**	**0.4233**	**2.4200e-003**	**0.1286**	**2.0100e-003**	**0.1306**	**0.0351**	**1.9000e-003**	**0.0370**	**0.0000**	**238.4463**	**238.4463**	**0.0226**	**0.0000**	**239.0117**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0244	0.4749	0.8211	1.1300e-003		1.7800e-003	1.7800e-003		1.7800e-003	1.7800e-003	0.0000	98.4404	98.4404	0.0269	0.0000	99.1129
Total	**0.0244**	**0.4749**	**0.8211**	**1.1300e-003**		**1.7800e-003**	**1.7800e-003**		**1.7800e-003**	**1.7800e-003**	**0.0000**	**98.4404**	**98.4404**	**0.0269**	**0.0000**	**99.1129**

Mitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0169	0.6398	0.2024	1.5400e-003	0.0385	1.3400e-003	0.0399	0.0111	1.2800e-003	0.0124	0.0000	158.9767	158.9767	0.0211	0.0000	159.5038
Worker	0.0306	0.0187	0.2208	8.8000e-004	0.0901	6.7000e-004	0.0907	0.0240	6.2000e-004	0.0246	0.0000	79.4696	79.4696	1.5300e-003	0.0000	79.5079
Total	**0.0475**	**0.6586**	**0.4233**	**2.4200e-003**	**0.1286**	**2.0100e-003**	**0.1306**	**0.0351**	**1.9000e-003**	**0.0370**	**0.0000**	**238.4463**	**238.4463**	**0.0226**	**0.0000**	**239.0117**

3.10 Phase 1-TH (Compressors/Gradeall) - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.0600e-003	0.0780	0.1234	1.9000e-004		2.8700e-003	2.8700e-003		2.7100e-003	2.7100e-003	0.0000	16.5340	16.5340	4.5000e-003	0.0000	16.6465
Total	**7.0600e-003**	**0.0780**	**0.1234**	**1.9000e-004**		**2.8700e-003**	**2.8700e-003**		**2.7100e-003**	**2.7100e-003**	**0.0000**	**16.5340**	**16.5340**	**4.5000e-003**	**0.0000**	**16.6465**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2800e-003	0.0891	0.0328	2.5000e-004	6.4700e-003	1.3000e-004	6.6000e-003	1.8700e-003	1.2000e-004	1.9900e-003	0.0000	26.0350	26.0350	3.4600e-003	0.0000	26.1215
Worker	4.8600e-003	2.8500e-003	0.0346	1.4000e-004	0.0151	1.1000e-004	0.0152	4.0200e-003	1.0000e-004	4.1300e-003	0.0000	12.8306	12.8306	2.3000e-004	0.0000	12.8364

Total	**7.1400e-003**	**0.0919**	**0.0675**	**3.9000e-004**	**0.0216**	**2.4000e-004**	**0.0218**	**5.8900e-003**	**2.2000e-004**	**6.1200e-003**	**0.0000**	**38.8656**	**38.8656**	**3.6900e-003**	**0.0000**	**38.9579**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.1000e-003	0.0798	0.1379	1.9000e-004		3.0000e-004	3.0000e-004		3.0000e-004	3.0000e-004	0.0000	16.5339	16.5339	4.5000e-003	0.0000	16.6465
Total	**4.1000e-003**	**0.0798**	**0.1379**	**1.9000e-004**		**3.0000e-004**	**3.0000e-004**		**3.0000e-004**	**3.0000e-004**	**0.0000**	**16.5339**	**16.5339**	**4.5000e-003**	**0.0000**	**16.6465**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.2800e-003	0.0891	0.0328	2.5000e-004	6.4700e-003	1.3000e-004	6.6000e-003	1.8700e-003	1.2000e-004	1.9900e-003	0.0000	26.0350	26.0350	3.4600e-003	0.0000	26.1215
Worker	4.8600e-003	2.8500e-003	0.0346	1.4000e-004	0.0151	1.1000e-004	0.0152	4.0200e-003	1.0000e-004	4.1300e-003	0.0000	12.8306	12.8306	2.3000e-004	0.0000	12.8364
Total	**7.1400e-003**	**0.0919**	**0.0675**	**3.9000e-004**	**0.0216**	**2.4000e-004**	**0.0218**	**5.8900e-003**	**2.2000e-004**	**6.1200e-003**	**0.0000**	**38.8656**	**38.8656**	**3.6900e-003**	**0.0000**	**38.9579**

3.11 Phase 1-F (Electric Cranes Only) - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0162	0.1820	0.0823	2.5000e-004		7.5600e-003	7.5600e-003		6.9500e-003	6.9500e-003	0.0000	22.0529	22.0529	7.1300e-003	0.0000	22.2312
Total	**0.0162**	**0.1820**	**0.0823**	**2.5000e-004**		**7.5600e-003**	**7.5600e-003**		**6.9500e-003**	**6.9500e-003**	**0.0000**	**22.0529**	**22.0529**	**7.1300e-003**	**0.0000**	**22.2312**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0102	0.3872	0.1225	9.3000e-004	0.0233	8.1000e-004	0.0241	6.7400e-003	7.8000e-004	7.5100e-003	0.0000	96.1951	96.1951	0.0128	0.0000	96.5140
Worker	0.0189	0.0116	0.1365	5.4000e-004	0.0557	4.1000e-004	0.0561	0.0148	3.8000e-004	0.0152	0.0000	49.1377	49.1377	9.5000e-004	0.0000	49.1614
Total	**0.0291**	**0.3987**	**0.2590**	**1.4700e-003**	**0.0790**	**1.2200e-003**	**0.0802**	**0.0216**	**1.1600e-003**	**0.0227**	**0.0000**	**145.3327**	**145.3327**	**0.0137**	**0.0000**	**145.6754**

Mitigated Construction On-Site

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

Off-Road	0.0000	0.0000	0.0000	2.5000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**2.5000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0102	0.3872	0.1225	9.3000e-004	0.0233	8.1000e-004	0.0241	6.7400e-003	7.8000e-004	7.5100e-003	0.0000	96.1951	96.1951	0.0128	0.0000	96.5140
Worker	0.0189	0.0116	0.1365	5.4000e-004	0.0557	4.1000e-004	0.0561	0.0148	3.8000e-004	0.0152	0.0000	49.1377	49.1377	9.5000e-004	0.0000	49.1614
Total	**0.0291**	**0.3987**	**0.2590**	**1.4700e-003**	**0.0790**	**1.2200e-003**	**0.0802**	**0.0216**	**1.1600e-003**	**0.0227**	**0.0000**	**145.3327**	**145.3327**	**0.0137**	**0.0000**	**145.6754**

3.11 Phase 1-F (Electric Cranes Only) - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0457	0.4960	0.2385	7.5000e-004		0.0207	0.0207		0.0191	0.0191	0.0000	65.9038	65.9038	0.0213	0.0000	66.4367
Total	**0.0457**	**0.4960**	**0.2385**	**7.5000e-004**		**0.0207**	**0.0207**		**0.0191**	**0.0191**	**0.0000**	**65.9038**	**65.9038**	**0.0213**	**0.0000**	**66.4367**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0246	0.9592	0.3534	2.7100e-003	0.0697	1.3800e-003	0.0711	0.0201	1.3200e-003	0.0215	0.0000	280.3363	280.3363	0.0373	0.0000	281.2678
Worker	0.0535	0.0314	0.3810	1.5600e-003	0.1664	1.2200e-003	0.1676	0.0443	1.1300e-003	0.0454	0.0000	141.1765	141.1765	2.5600e-003	0.0000	141.2406
Total	**0.0781**	**0.9905**	**0.7344**	**4.2700e-003**	**0.2361**	**2.6000e-003**	**0.2387**	**0.0644**	**2.4500e-003**	**0.0669**	**0.0000**	**421.5128**	**421.5128**	**0.0398**	**0.0000**	**422.5084**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	7.5000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**7.5000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0246	0.9592	0.3534	2.7100e-003	0.0697	1.3800e-003	0.0711	0.0201	1.3200e-003	0.0215	0.0000	280.3363	280.3363	0.0373	0.0000	281.2678
Worker	0.0535	0.0314	0.3810	1.5600e-003	0.1664	1.2200e-003	0.1676	0.0443	1.1300e-003	0.0454	0.0000	141.1765	141.1765	2.5600e-003	0.0000	141.2406
Total	**0.0781**	**0.9905**	**0.7344**	**4.2700e-003**	**0.2361**	**2.6000e-003**	**0.2387**	**0.0644**	**2.4500e-003**	**0.0669**	**0.0000**	**421.5128**	**421.5128**	**0.0398**	**0.0000**	**422.5084**

3.11 Phase 1-F (Electric Cranes Only) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0290	0.3066	0.1553	5.0000e-004		0.0128	0.0128		0.0117	0.0117	0.0000	44.3574	44.3574	0.0144	0.0000	44.7160
Total	**0.0290**	**0.3066**	**0.1553**	**5.0000e-004**		**0.0128**	**0.0128**		**0.0117**	**0.0117**	**0.0000**	**44.3574**	**44.3574**	**0.0144**	**0.0000**	**44.7160**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0158	0.6298	0.2354	1.8000e-003	0.0469	8.9000e-004	0.0478	0.0136	8.5000e-004	0.0144	0.0000	186.9375	186.9375	0.0250	0.0000	187.5636
Worker	0.0342	0.0192	0.2403	1.0100e-003	0.1120	8.2000e-004	0.1128	0.0298	7.5000e-004	0.0306	0.0000	91.2396	91.2396	1.5700e-003	0.0000	91.2788

Total	**0.0501**	**0.6490**	**0.4758**	**2.8100e-003**	**0.1589**	**1.7100e-003**	**0.1606**	**0.0434**	**1.6000e-003**	**0.0450**	**0.0000**	**278.1771**	**278.1771**	**0.0266**	**0.0000**	**278.8424**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	5.0000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**5.0000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0158	0.6298	0.2354	1.8000e-003	0.0469	8.9000e-004	0.0478	0.0136	8.5000e-004	0.0144	0.0000	186.9375	186.9375	0.0250	0.0000	187.5636
Worker	0.0342	0.0192	0.2403	1.0100e-003	0.1120	8.2000e-004	0.1128	0.0298	7.5000e-004	0.0306	0.0000	91.2396	91.2396	1.5700e-003	0.0000	91.2788
Total	**0.0501**	**0.6490**	**0.4758**	**2.8100e-003**	**0.1589**	**1.7100e-003**	**0.1606**	**0.0434**	**1.6000e-003**	**0.0450**	**0.0000**	**278.1771**	**278.1771**	**0.0266**	**0.0000**	**278.8424**

3.12 Phase 1-C,D (Electric Cranes Only) - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0242	0.2720	0.1230	3.8000e-004		0.0113	0.0113		0.0104	0.0104	0.0000	32.9526	32.9526	0.0107	0.0000	33.2190
Total	**0.0242**	**0.2720**	**0.1230**	**3.8000e-004**		**0.0113**	**0.0113**		**0.0104**	**0.0104**	**0.0000**	**32.9526**	**32.9526**	**0.0107**	**0.0000**	**33.2190**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0121	0.4586	0.1451	1.1100e-003	0.0276	9.6000e-004	0.0286	7.9800e-003	9.2000e-004	8.9000e-003	0.0000	113.9400	113.9400	0.0151	0.0000	114.3178
Worker	0.0222	0.0136	0.1599	6.4000e-004	0.0652	4.9000e-004	0.0657	0.0174	4.5000e-004	0.0178	0.0000	57.5609	57.5609	1.1100e-003	0.0000	57.5886
Total	**0.0342**	**0.4721**	**0.3050**	**1.7500e-003**	**0.0928**	**1.4500e-003**	**0.0943**	**0.0253**	**1.3700e-003**	**0.0267**	**0.0000**	**171.5009**	**171.5009**	**0.0162**	**0.0000**	**171.9065**

Mitigated Construction On-Site

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

Off-Road	0.0000	0.0000	0.0000	3.8000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**3.8000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0121	0.4586	0.1451	1.1100e-003	0.0276	9.6000e-004	0.0286	7.9800e-003	9.2000e-004	8.9000e-003	0.0000	113.9400	113.9400	0.0151	0.0000	114.3178
Worker	0.0222	0.0136	0.1599	6.4000e-004	0.0652	4.9000e-004	0.0657	0.0174	4.5000e-004	0.0178	0.0000	57.5609	57.5609	1.1100e-003	0.0000	57.5886
Total	**0.0342**	**0.4721**	**0.3050**	**1.7500e-003**	**0.0928**	**1.4500e-003**	**0.0943**	**0.0253**	**1.3700e-003**	**0.0267**	**0.0000**	**171.5009**	**171.5009**	**0.0162**	**0.0000**	**171.9065**

3.12 Phase 1-C,D (Electric Cranes Only) - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0914	0.9920	0.4770	1.5000e-003		0.0414	0.0414		0.0381	0.0381	0.0000	131.8076	131.8076	0.0426	0.0000	132.8733
Total	**0.0914**	**0.9920**	**0.4770**	**1.5000e-003**		**0.0414**	**0.0414**		**0.0381**	**0.0381**	**0.0000**	**131.8076**	**131.8076**	**0.0426**	**0.0000**	**132.8733**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0390	1.5206	0.5602	4.2900e-003	0.1105	2.1800e-003	0.1126	0.0319	2.0900e-003	0.0340	0.0000	444.4356	444.4356	0.0591	0.0000	445.9124
Worker	0.0839	0.0492	0.5974	2.4400e-003	0.2609	1.9200e-003	0.2628	0.0694	1.7700e-003	0.0712	0.0000	221.3508	221.3508	4.0200e-003	0.0000	221.4513
Total	**0.1229**	**1.5698**	**1.1576**	**6.7300e-003**	**0.3714**	**4.1000e-003**	**0.3755**	**0.1013**	**3.8600e-003**	**0.1052**	**0.0000**	**665.7863**	**665.7863**	**0.0631**	**0.0000**	**667.3637**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	1.5000e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**1.5000e-003**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0390	1.5206	0.5602	4.2900e-003	0.1105	2.1800e-003	0.1126	0.0319	2.0900e-003	0.0340	0.0000	444.4356	444.4356	0.0591	0.0000	445.9124
Worker	0.0839	0.0492	0.5974	2.4400e-003	0.2609	1.9200e-003	0.2628	0.0694	1.7700e-003	0.0712	0.0000	221.3508	221.3508	4.0200e-003	0.0000	221.4513
Total	**0.1229**	**1.5698**	**1.1576**	**6.7300e-003**	**0.3714**	**4.1000e-003**	**0.3755**	**0.1013**	**3.8600e-003**	**0.1052**	**0.0000**	**665.7863**	**665.7863**	**0.0631**	**0.0000**	**667.3637**

3.12 Phase 1-C,D (Electric Cranes Only) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0581	0.6133	0.3106	1.0100e-003		0.0255	0.0255		0.0235	0.0235	0.0000	88.7148	88.7148	0.0287	0.0000	89.4321
Total	**0.0581**	**0.6133**	**0.3106**	**1.0100e-003**		**0.0255**	**0.0255**		**0.0235**	**0.0235**	**0.0000**	**88.7148**	**88.7148**	**0.0287**	**0.0000**	**89.4321**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0251	0.9984	0.3733	2.8500e-003	0.0744	1.4100e-003	0.0758	0.0215	1.3500e-003	0.0228	0.0000	296.3643	296.3643	0.0397	0.0000	297.3569
Worker	0.0537	0.0301	0.3768	1.5800e-003	0.1756	1.2800e-003	0.1769	0.0467	1.1800e-003	0.0479	0.0000	143.0547	143.0547	2.4600e-003	0.0000	143.1161

Total	**0.0788**	**1.0285**	**0.7500**	**4.4300e-003**	**0.2500**	**2.6900e-003**	**0.2527**	**0.0682**	**2.5300e-003**	**0.0707**	**0.0000**	**439.4190**	**439.4190**	**0.0422**	**0.0000**	**440.4730**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	1.0100e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**1.0100e-003**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0251	0.9984	0.3733	2.8500e-003	0.0744	1.4100e-003	0.0758	0.0215	1.3500e-003	0.0228	0.0000	296.3643	296.3643	0.0397	0.0000	297.3569
Worker	0.0537	0.0301	0.3768	1.5800e-003	0.1756	1.2800e-003	0.1769	0.0467	1.1800e-003	0.0479	0.0000	143.0547	143.0547	2.4600e-003	0.0000	143.1161
Total	**0.0788**	**1.0285**	**0.7500**	**4.4300e-003**	**0.2500**	**2.6900e-003**	**0.2527**	**0.0682**	**2.5300e-003**	**0.0707**	**0.0000**	**439.4190**	**439.4190**	**0.0422**	**0.0000**	**440.4730**

3.13 Phase 1-E (Electric Cranes Only) - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0121	0.1360	0.0615	1.9000e-004		5.6500e-003	5.6500e-003		5.1900e-003	5.1900e-003	0.0000	16.4763	16.4763	5.3300e-003	0.0000	16.6095
Total	**0.0121**	**0.1360**	**0.0615**	**1.9000e-004**		**5.6500e-003**	**5.6500e-003**		**5.1900e-003**	**5.1900e-003**	**0.0000**	**16.4763**	**16.4763**	**5.3300e-003**	**0.0000**	**16.6095**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.3900e-003	0.2046	0.0647	4.9000e-004	0.0123	4.3000e-004	0.0128	3.5600e-003	4.1000e-004	3.9700e-003	0.0000	50.8348	50.8348	6.7400e-003	0.0000	51.0033
Worker	9.7700e-003	5.9800e-003	0.0705	2.8000e-004	0.0288	2.1000e-004	0.0290	7.6500e-003	2.0000e-004	7.8500e-003	0.0000	25.3812	25.3812	4.9000e-004	0.0000	25.3934
Total	**0.0152**	**0.2106**	**0.1353**	**7.7000e-004**	**0.0411**	**6.4000e-004**	**0.0417**	**0.0112**	**6.1000e-004**	**0.0118**	**0.0000**	**76.2160**	**76.2160**	**7.2300e-003**	**0.0000**	**76.3968**

Mitigated Construction On-Site

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

Off-Road	0.0000	0.0000	0.0000	1.9000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**1.9000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.3900e-003	0.2046	0.0647	4.9000e-004	0.0123	4.3000e-004	0.0128	3.5600e-003	4.1000e-004	3.9700e-003	0.0000	50.8348	50.8348	6.7400e-003	0.0000	51.0033
Worker	9.7700e-003	5.9800e-003	0.0705	2.8000e-004	0.0288	2.1000e-004	0.0290	7.6500e-003	2.0000e-004	7.8500e-003	0.0000	25.3812	25.3812	4.9000e-004	0.0000	25.3934
Total	**0.0152**	**0.2106**	**0.1353**	**7.7000e-004**	**0.0411**	**6.4000e-004**	**0.0417**	**0.0112**	**6.1000e-004**	**0.0118**	**0.0000**	**76.2160**	**76.2160**	**7.2300e-003**	**0.0000**	**76.3968**

3.13 Phase 1-E (Electric Cranes Only) - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0381	0.4140	0.1990	6.3000e-004		0.0173	0.0173		0.0159	0.0159	0.0000	55.0043	55.0043	0.0178	0.0000	55.4491
Total	**0.0381**	**0.4140**	**0.1990**	**6.3000e-004**		**0.0173**	**0.0173**		**0.0159**	**0.0159**	**0.0000**	**55.0043**	**55.0043**	**0.0178**	**0.0000**	**55.4491**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0145	0.5662	0.2086	1.6000e-003	0.0411	8.1000e-004	0.0419	0.0119	7.8000e-004	0.0127	0.0000	165.4931	165.4931	0.0220	0.0000	166.0430
Worker	0.0309	0.0181	0.2199	9.0000e-004	0.0960	7.1000e-004	0.0967	0.0255	6.5000e-004	0.0262	0.0000	81.4614	81.4614	1.4800e-003	0.0000	81.4984
Total	**0.0454**	**0.5843**	**0.4285**	**2.5000e-003**	**0.1372**	**1.5200e-003**	**0.1387**	**0.0374**	**1.4300e-003**	**0.0389**	**0.0000**	**246.9545**	**246.9545**	**0.0235**	**0.0000**	**247.5414**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	6.3000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**6.3000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0145	0.5662	0.2086	1.6000e-003	0.0411	8.1000e-004	0.0419	0.0119	7.8000e-004	0.0127	0.0000	165.4931	165.4931	0.0220	0.0000	166.0430
Worker	0.0309	0.0181	0.2199	9.0000e-004	0.0960	7.1000e-004	0.0967	0.0255	6.5000e-004	0.0262	0.0000	81.4614	81.4614	1.4800e-003	0.0000	81.4984
Total	**0.0454**	**0.5843**	**0.4285**	**2.5000e-003**	**0.1372**	**1.5200e-003**	**0.1387**	**0.0374**	**1.4300e-003**	**0.0389**	**0.0000**	**246.9545**	**246.9545**	**0.0235**	**0.0000**	**247.5414**

3.14 Phase 1-TH Architectural Coatings1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0262					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.8600e-003	0.0610	0.0786	1.3000e-004		3.5400e-003	3.5400e-003		3.5400e-003	3.5400e-003	0.0000	11.0641	11.0641	7.2000e-004	0.0000	11.0821
Total	**0.0350**	**0.0610**	**0.0786**	**1.3000e-004**		**3.5400e-003**	**3.5400e-003**		**3.5400e-003**	**3.5400e-003**	**0.0000**	**11.0641**	**11.0641**	**7.2000e-004**	**0.0000**	**11.0821**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0152	9.2900e-003	0.1096	4.4000e-004	0.0447	3.3000e-004	0.0450	0.0119	3.1000e-004	0.0122	0.0000	39.4315	39.4315	7.6000e-004	0.0000	39.4505

Total	**0.0152**	**9.2900e-003**	**0.1096**	**4.4000e-004**	**0.0447**	**3.3000e-004**	**0.0450**	**0.0119**	**3.1000e-004**	**0.0122**	**0.0000**	**39.4315**	**39.4315**	**7.6000e-004**	**0.0000**	**39.4505**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0262					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3600e-003	0.0459	0.0794	1.3000e-004		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	11.0641	11.0641	7.2000e-004	0.0000	11.0821
Total	**0.0285**	**0.0459**	**0.0794**	**1.3000e-004**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**	**0.0000**	**11.0641**	**11.0641**	**7.2000e-004**	**0.0000**	**11.0821**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0152	9.2900e-003	0.1096	4.4000e-004	0.0447	3.3000e-004	0.0450	0.0119	3.1000e-004	0.0122	0.0000	39.4315	39.4315	7.6000e-004	0.0000	39.4505
Total	**0.0152**	**9.2900e-003**	**0.1096**	**4.4000e-004**	**0.0447**	**3.3000e-004**	**0.0450**	**0.0119**	**3.1000e-004**	**0.0122**	**0.0000**	**39.4315**	**39.4315**	**7.6000e-004**	**0.0000**	**39.4505**

3.14 Phase 1-TH Architectural Coatings1 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0342					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0109	0.0738	0.1026	1.7000e-004		4.0100e-003	4.0100e-003		4.0100e-003	4.0100e-003	0.0000	14.4684	14.4684	8.7000e-004	0.0000	14.4901
Total	**0.0451**	**0.0738**	**0.1026**	**1.7000e-004**		**4.0100e-003**	**4.0100e-003**		**4.0100e-003**	**4.0100e-003**	**0.0000**	**14.4684**	**14.4684**	**8.7000e-004**	**0.0000**	**14.4901**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0188	0.0110	0.1338	5.5000e-004	0.0584	4.3000e-004	0.0589	0.0156	4.0000e-004	0.0159	0.0000	49.5727	49.5727	9.0000e-004	0.0000	49.5952
Total	**0.0188**	**0.0110**	**0.1338**	**5.5000e-004**	**0.0584**	**4.3000e-004**	**0.0589**	**0.0156**	**4.0000e-004**	**0.0159**	**0.0000**	**49.5727**	**49.5727**	**9.0000e-004**	**0.0000**	**49.5952**

Mitigated Construction On-Site

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

Archit. Coating	0.0342					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0900e-003	0.0601	0.1038	1.7000e-004		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	14.4684	14.4684	8.7000e-004	0.0000	14.4901
Total	**0.0373**	**0.0601**	**0.1038**	**1.7000e-004**		**2.2000e-004**	**2.2000e-004**		**2.2000e-004**	**2.2000e-004**	**0.0000**	**14.4684**	**14.4684**	**8.7000e-004**	**0.0000**	**14.4901**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0188	0.0110	0.1338	5.5000e-004	0.0584	4.3000e-004	0.0589	0.0156	4.0000e-004	0.0159	0.0000	49.5727	49.5727	9.0000e-004	0.0000	49.5952
Total	**0.0188**	**0.0110**	**0.1338**	**5.5000e-004**	**0.0584**	**4.3000e-004**	**0.0589**	**0.0156**	**4.0000e-004**	**0.0159**	**0.0000**	**49.5727**	**49.5727**	**9.0000e-004**	**0.0000**	**49.5952**

3.15 Phase 1-TH (HD Equipment Mix2) - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0487	0.4180	0.4994	1.4700e-003		0.0164	0.0164		0.0156	0.0156	0.0000	127.9596	127.9596	0.0326	0.0000	128.7736
Total	**0.0487**	**0.4180**	**0.4994**	**1.4700e-003**		**0.0164**	**0.0164**		**0.0156**	**0.0156**	**0.0000**	**127.9596**	**127.9596**	**0.0326**	**0.0000**	**128.7736**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0112	0.4373	0.1611	1.2300e-003	0.0318	6.3000e-004	0.0324	9.1800e-003	6.0000e-004	9.7800e-003	0.0000	127.8081	127.8081	0.0170	0.0000	128.2328
Worker	0.0239	0.0140	0.1700	7.0000e-004	0.0743	5.5000e-004	0.0748	0.0198	5.0000e-004	0.0203	0.0000	62.9864	62.9864	1.1400e-003	0.0000	63.0150
Total	**0.0351**	**0.4513**	**0.3311**	**1.9300e-003**	**0.1060**	**1.1800e-003**	**0.1072**	**0.0289**	**1.1000e-003**	**0.0300**	**0.0000**	**190.7945**	**190.7945**	**0.0181**	**0.0000**	**191.2478**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0255	0.4505	0.8300	1.4700e-003		4.6600e-003	4.6600e-003		4.6600e-003	4.6600e-003	0.0000	127.9594	127.9594	0.0326	0.0000	128.7734
Total	**0.0255**	**0.4505**	**0.8300**	**1.4700e-003**		**4.6600e-003**	**4.6600e-003**		**4.6600e-003**	**4.6600e-003**	**0.0000**	**127.9594**	**127.9594**	**0.0326**	**0.0000**	**128.7734**

Mitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0112	0.4373	0.1611	1.2300e-003	0.0318	6.3000e-004	0.0324	9.1800e-003	6.0000e-004	9.7800e-003	0.0000	127.8081	127.8081	0.0170	0.0000	128.2328
Worker	0.0239	0.0140	0.1700	7.0000e-004	0.0743	5.5000e-004	0.0748	0.0198	5.0000e-004	0.0203	0.0000	62.9864	62.9864	1.1400e-003	0.0000	63.0150
Total	**0.0351**	**0.4513**	**0.3311**	**1.9300e-003**	**0.1060**	**1.1800e-003**	**0.1072**	**0.0289**	**1.1000e-003**	**0.0300**	**0.0000**	**190.7945**	**190.7945**	**0.0181**	**0.0000**	**191.2478**

3.16 Phase 1-E Architectural Coatings - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0776					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.1320	0.1835	3.0000e-004		7.1800e-003	7.1800e-003		7.1800e-003	7.1800e-003	0.0000	25.8730	25.8730	1.5500e-003	0.0000	25.9117
Total	**0.0970**	**0.1320**	**0.1835**	**3.0000e-004**		**7.1800e-003**	**7.1800e-003**		**7.1800e-003**	**7.1800e-003**	**0.0000**	**25.8730**	**25.8730**	**1.5500e-003**	**0.0000**	**25.9117**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0216	0.0127	0.1540	6.3000e-004	0.0673	5.0000e-004	0.0678	0.0179	4.6000e-004	0.0184	0.0000	57.0605	57.0605	1.0400e-003	0.0000	57.0864

Total	**0.0216**	**0.0127**	**0.1540**	**6.3000e-004**	**0.0673**	**5.0000e-004**	**0.0678**	**0.0179**	**4.6000e-004**	**0.0184**	**0.0000**	**57.0605**	**57.0605**	**1.0400e-003**	**0.0000**	**57.0864**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0776					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5200e-003	0.1074	0.1857	3.0000e-004		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	25.8729	25.8729	1.5500e-003	0.0000	25.9116
Total	**0.0831**	**0.1074**	**0.1857**	**3.0000e-004**		**4.0000e-004**	**4.0000e-004**		**4.0000e-004**	**4.0000e-004**	**0.0000**	**25.8729**	**25.8729**	**1.5500e-003**	**0.0000**	**25.9116**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0216	0.0127	0.1540	6.3000e-004	0.0673	5.0000e-004	0.0678	0.0179	4.6000e-004	0.0184	0.0000	57.0605	57.0605	1.0400e-003	0.0000	57.0864
Total	**0.0216**	**0.0127**	**0.1540**	**6.3000e-004**	**0.0673**	**5.0000e-004**	**0.0678**	**0.0179**	**4.6000e-004**	**0.0184**	**0.0000**	**57.0605**	**57.0605**	**1.0400e-003**	**0.0000**	**57.0864**

3.17 Phase 1-TH (No HD Equipment1) - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.8900e-003	0.0291	0.0595	9.0000e-005		5.0000e-004	5.0000e-004		4.6000e-004	4.6000e-004	0.0000	8.0402	8.0402	2.6000e-003	0.0000	8.1052
Total	**1.8900e-003**	**0.0291**	**0.0595**	**9.0000e-005**		**5.0000e-004**	**5.0000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**8.0402**	**8.0402**	**2.6000e-003**	**0.0000**	**8.1052**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0113	0.4413	0.1626	1.2500e-003	0.0321	6.3000e-004	0.0327	9.2700e-003	6.1000e-004	9.8700e-003	0.0000	128.9915	128.9915	0.0172	0.0000	129.4202
Worker	0.0241	0.0141	0.1716	7.0000e-004	0.0749	5.5000e-004	0.0755	0.0199	5.1000e-004	0.0204	0.0000	63.5696	63.5696	1.1500e-003	0.0000	63.5985
Total	**0.0354**	**0.4555**	**0.3342**	**1.9500e-003**	**0.1070**	**1.1800e-003**	**0.1082**	**0.0292**	**1.1200e-003**	**0.0303**	**0.0000**	**192.5611**	**192.5611**	**0.0183**	**0.0000**	**193.0187**

Mitigated Construction On-Site

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

Off-Road	0.0000	0.0000	0.0000	9.0000e-005		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**9.0000e-005**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0113	0.4413	0.1626	1.2500e-003	0.0321	6.3000e-004	0.0327	9.2700e-003	6.1000e-004	9.8700e-003	0.0000	128.9915	128.9915	0.0172	0.0000	129.4202
Worker	0.0241	0.0141	0.1716	7.0000e-004	0.0749	5.5000e-004	0.0755	0.0199	5.1000e-004	0.0204	0.0000	63.5696	63.5696	1.1500e-003	0.0000	63.5985
Total	**0.0354**	**0.4555**	**0.3342**	**1.9500e-003**	**0.1070**	**1.1800e-003**	**0.1082**	**0.0292**	**1.1200e-003**	**0.0303**	**0.0000**	**192.5611**	**192.5611**	**0.0183**	**0.0000**	**193.0187**

3.18 Phase 1-TH (Gradealls Only) - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4400e-003	0.0588	0.0961	1.4000e-004		1.8900e-003	1.8900e-003		1.7400e-003	1.7400e-003	0.0000	12.7185	12.7185	4.1100e-003	0.0000	12.8213
Total	**4.4400e-003**	**0.0588**	**0.0961**	**1.4000e-004**		**1.8900e-003**	**1.8900e-003**		**1.7400e-003**	**1.7400e-003**	**0.0000**	**12.7185**	**12.7185**	**4.1100e-003**	**0.0000**	**12.8213**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1800e-003	0.0850	0.0313	2.4000e-004	6.1800e-003	1.2000e-004	6.3000e-003	1.7900e-003	1.2000e-004	1.9000e-003	0.0000	24.8516	24.8516	3.3000e-003	0.0000	24.9342
Worker	4.6400e-003	2.7200e-003	0.0331	1.4000e-004	0.0144	1.1000e-004	0.0145	3.8400e-003	1.0000e-004	3.9400e-003	0.0000	12.2474	12.2474	2.2000e-004	0.0000	12.2529
Total	**6.8200e-003**	**0.0878**	**0.0644**	**3.8000e-004**	**0.0206**	**2.3000e-004**	**0.0208**	**5.6300e-003**	**2.2000e-004**	**5.8400e-003**	**0.0000**	**37.0989**	**37.0989**	**3.5200e-003**	**0.0000**	**37.1871**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2600e-003	0.0634	0.1096	1.4000e-004		2.4000e-004	2.4000e-004		2.4000e-004	2.4000e-004	0.0000	12.7185	12.7185	4.1100e-003	0.0000	12.8213
Total	**3.2600e-003**	**0.0634**	**0.1096**	**1.4000e-004**		**2.4000e-004**	**2.4000e-004**		**2.4000e-004**	**2.4000e-004**	**0.0000**	**12.7185**	**12.7185**	**4.1100e-003**	**0.0000**	**12.8213**

Mitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1800e-003	0.0850	0.0313	2.4000e-004	6.1800e-003	1.2000e-004	6.3000e-003	1.7900e-003	1.2000e-004	1.9000e-003	0.0000	24.8516	24.8516	3.3000e-003	0.0000	24.9342
Worker	4.6400e-003	2.7200e-003	0.0331	1.4000e-004	0.0144	1.1000e-004	0.0145	3.8400e-003	1.0000e-004	3.9400e-003	0.0000	12.2474	12.2474	2.2000e-004	0.0000	12.2529
Total	**6.8200e-003**	**0.0878**	**0.0644**	**3.8000e-004**	**0.0206**	**2.3000e-004**	**0.0208**	**5.6300e-003**	**2.2000e-004**	**5.8400e-003**	**0.0000**	**37.0989**	**37.0989**	**3.5200e-003**	**0.0000**	**37.1871**

3.18 Phase 1-TH (Gradealls Only) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0225	0.2971	0.5036	7.6000e-004		9.0500e-003	9.0500e-003		8.3200e-003	8.3200e-003	0.0000	66.6073	66.6073	0.0215	0.0000	67.1458
Total	**0.0225**	**0.2971**	**0.5036**	**7.6000e-004**		**9.0500e-003**	**9.0500e-003**		**8.3200e-003**	**8.3200e-003**	**0.0000**	**66.6073**	**66.6073**	**0.0215**	**0.0000**	**67.1458**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0109	0.4345	0.1624	1.2400e-003	0.0324	6.1000e-004	0.0330	9.3500e-003	5.9000e-004	9.9400e-003	0.0000	128.9673	128.9673	0.0173	0.0000	129.3993
Worker	0.0231	0.0130	0.1622	6.8000e-004	0.0756	5.5000e-004	0.0762	0.0201	5.1000e-004	0.0206	0.0000	61.5988	61.5988	1.0600e-003	0.0000	61.6253

Total	**0.0340**	**0.4474**	**0.3247**	**1.9200e-003**	**0.1080**	**1.1600e-003**	**0.1091**	**0.0295**	**1.1000e-003**	**0.0306**	**0.0000**	**190.5661**	**190.5661**	**0.0183**	**0.0000**	**191.0245**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0171	0.3321	0.5743	7.6000e-004		1.2400e-003	1.2400e-003		1.2400e-003	1.2400e-003	0.0000	66.6072	66.6072	0.0215	0.0000	67.1458
Total	**0.0171**	**0.3321**	**0.5743**	**7.6000e-004**		**1.2400e-003**	**1.2400e-003**		**1.2400e-003**	**1.2400e-003**	**0.0000**	**66.6072**	**66.6072**	**0.0215**	**0.0000**	**67.1458**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0109	0.4345	0.1624	1.2400e-003	0.0324	6.1000e-004	0.0330	9.3500e-003	5.9000e-004	9.9400e-003	0.0000	128.9673	128.9673	0.0173	0.0000	129.3993
Worker	0.0231	0.0130	0.1622	6.8000e-004	0.0756	5.5000e-004	0.0762	0.0201	5.1000e-004	0.0206	0.0000	61.5988	61.5988	1.0600e-003	0.0000	61.6253
Total	**0.0340**	**0.4474**	**0.3247**	**1.9200e-003**	**0.1080**	**1.1600e-003**	**0.1091**	**0.0295**	**1.1000e-003**	**0.0306**	**0.0000**	**190.5661**	**190.5661**	**0.0183**	**0.0000**	**191.0245**

3.19 Phase 1-F Architectural Coatings - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1114					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0211	0.1422	0.2112	3.5000e-004		7.1100e-003	7.1100e-003		7.1100e-003	7.1100e-003	0.0000	29.7880	29.7880	1.6800e-003	0.0000	29.8299
Total	**0.1325**	**0.1422**	**0.2112**	**3.5000e-004**		**7.1100e-003**	**7.1100e-003**		**7.1100e-003**	**7.1100e-003**	**0.0000**	**29.7880**	**29.7880**	**1.6800e-003**	**0.0000**	**29.8299**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0342	0.0192	0.2403	1.0100e-003	0.1120	8.2000e-004	0.1128	0.0298	7.5000e-004	0.0306	0.0000	91.2396	91.2396	1.5700e-003	0.0000	91.2788
Total	**0.0342**	**0.0192**	**0.2403**	**1.0100e-003**	**0.1120**	**8.2000e-004**	**0.1128**	**0.0298**	**7.5000e-004**	**0.0306**	**0.0000**	**91.2396**	**91.2396**	**1.5700e-003**	**0.0000**	**91.2788**

Mitigated Construction On-Site

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

Archit. Coating	0.1114					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3600e-003	0.1237	0.2138	3.5000e-004		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004	0.0000	29.7879	29.7879	1.6800e-003	0.0000	29.8299
Total	**0.1177**	**0.1237**	**0.2138**	**3.5000e-004**		**4.6000e-004**	**4.6000e-004**		**4.6000e-004**	**4.6000e-004**	**0.0000**	**29.7879**	**29.7879**	**1.6800e-003**	**0.0000**	**29.8299**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0342	0.0192	0.2403	1.0100e-003	0.1120	8.2000e-004	0.1128	0.0298	7.5000e-004	0.0306	0.0000	91.2396	91.2396	1.5700e-003	0.0000	91.2788
Total	**0.0342**	**0.0192**	**0.2403**	**1.0100e-003**	**0.1120**	**8.2000e-004**	**0.1128**	**0.0298**	**7.5000e-004**	**0.0306**	**0.0000**	**91.2396**	**91.2396**	**1.5700e-003**	**0.0000**	**91.2788**

3.20 Phase 1-C,D Architectural Coatings - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1793					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0366	0.2470	0.3669	6.0000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	51.7459	51.7459	2.9100e-003	0.0000	51.8188
Total	**0.2159**	**0.2470**	**0.3669**	**6.0000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**51.7459**	**51.7459**	**2.9100e-003**	**0.0000**	**51.8188**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0466	0.0262	0.3273	1.3700e-003	0.1525	1.1100e-003	0.1537	0.0406	1.0200e-003	0.0416	0.0000	124.2532	124.2532	2.1400e-003	0.0000	124.3066
Total	**0.0466**	**0.0262**	**0.3273**	**1.3700e-003**	**0.1525**	**1.1100e-003**	**0.1537**	**0.0406**	**1.0200e-003**	**0.0416**	**0.0000**	**124.2532**	**124.2532**	**2.1400e-003**	**0.0000**	**124.3066**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1793					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0110	0.2148	0.3714	6.0000e-004		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	51.7459	51.7459	2.9100e-003	0.0000	51.8187
Total	**0.1903**	**0.2148**	**0.3714**	**6.0000e-004**		**8.0000e-004**	**8.0000e-004**		**8.0000e-004**	**8.0000e-004**	**0.0000**	**51.7459**	**51.7459**	**2.9100e-003**	**0.0000**	**51.8187**

Mitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0466	0.0262	0.3273	1.3700e-003	0.1525	1.1100e-003	0.1537	0.0406	1.0200e-003	0.0416	0.0000	124.2532	124.2532	2.1400e-003	0.0000	124.3066
Total	**0.0466**	**0.0262**	**0.3273**	**1.3700e-003**	**0.1525**	**1.1100e-003**	**0.1537**	**0.0406**	**1.0200e-003**	**0.0416**	**0.0000**	**124.2532**	**124.2532**	**2.1400e-003**	**0.0000**	**124.3066**

3.21 Phase 1-TH Architectural Coatings2 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0604					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0183	0.1235	0.1834	3.0000e-004		6.1700e-003	6.1700e-003		6.1700e-003	6.1700e-003	0.0000	25.8730	25.8730	1.4600e-003	0.0000	25.9094
Total	**0.0787**	**0.1235**	**0.1834**	**3.0000e-004**		**6.1700e-003**	**6.1700e-003**		**6.1700e-003**	**6.1700e-003**	**0.0000**	**25.8730**	**25.8730**	**1.4600e-003**	**0.0000**	**25.9094**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0320	0.0179	0.2242	9.4000e-004	0.1045	7.6000e-004	0.1053	0.0278	7.0000e-004	0.0285	0.0000	85.1183	85.1183	1.4600e-003	0.0000	85.1549

Total	**0.0320**	**0.0179**	**0.2242**	**9.4000e-004**	**0.1045**	**7.6000e-004**	**0.1053**	**0.0278**	**7.0000e-004**	**0.0285**	**0.0000**	**85.1183**	**85.1183**	**1.4600e-003**	**0.0000**	**85.1549**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0604					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5200e-003	0.1074	0.1857	3.0000e-004		4.0000e-004	4.0000e-004		4.0000e-004	4.0000e-004	0.0000	25.8729	25.8729	1.4600e-003	0.0000	25.9094
Total	**0.0659**	**0.1074**	**0.1857**	**3.0000e-004**		**4.0000e-004**	**4.0000e-004**		**4.0000e-004**	**4.0000e-004**	**0.0000**	**25.8729**	**25.8729**	**1.4600e-003**	**0.0000**	**25.9094**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0320	0.0179	0.2242	9.4000e-004	0.1045	7.6000e-004	0.1053	0.0278	7.0000e-004	0.0285	0.0000	85.1183	85.1183	1.4600e-003	0.0000	85.1549
Total	**0.0320**	**0.0179**	**0.2242**	**9.4000e-004**	**0.1045**	**7.6000e-004**	**0.1053**	**0.0278**	**7.0000e-004**	**0.0285**	**0.0000**	**85.1183**	**85.1183**	**1.4600e-003**	**0.0000**	**85.1549**

3.22 Phase 1-TH (Excavator/BobCats Only) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.0900e-003	0.0321	0.0440	1.6000e-004		1.0900e-003	1.0900e-003		1.0000e-003	1.0000e-003	0.0000	14.0320	14.0320	4.5400e-003	0.0000	14.1455
Total	**4.0900e-003**	**0.0321**	**0.0440**	**1.6000e-004**		**1.0900e-003**	**1.0900e-003**		**1.0000e-003**	**1.0000e-003**	**0.0000**	**14.0320**	**14.0320**	**4.5400e-003**	**0.0000**	**14.1455**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9900e-003	0.0790	0.0295	2.3000e-004	5.8800e-003	1.1000e-004	5.9900e-003	1.7000e-003	1.1000e-004	1.8100e-003	0.0000	23.4486	23.4486	3.1400e-003	0.0000	23.5271
Worker	4.2000e-003	2.3600e-003	0.0295	1.2000e-004	0.0138	1.0000e-004	0.0139	3.6600e-003	9.0000e-005	3.7500e-003	0.0000	11.1998	11.1998	1.9000e-004	0.0000	11.2046
Total	**6.1900e-003**	**0.0814**	**0.0590**	**3.5000e-004**	**0.0196**	**2.1000e-004**	**0.0198**	**5.3600e-003**	**2.0000e-004**	**5.5600e-003**	**0.0000**	**34.6484**	**34.6484**	**3.3300e-003**	**0.0000**	**34.7317**

Mitigated Construction On-Site

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

Off-Road	2.8000e-003	0.0486	0.0902	1.6000e-004		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	14.0320	14.0320	4.5400e-003	0.0000	14.1454
Total	**2.8000e-003**	**0.0486**	**0.0902**	**1.6000e-004**		**7.0000e-004**	**7.0000e-004**		**7.0000e-004**	**7.0000e-004**	**0.0000**	**14.0320**	**14.0320**	**4.5400e-003**	**0.0000**	**14.1454**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9900e-003	0.0790	0.0295	2.3000e-004	5.8800e-003	1.1000e-004	5.9900e-003	1.7000e-003	1.1000e-004	1.8100e-003	0.0000	23.4486	23.4486	3.1400e-003	0.0000	23.5271
Worker	4.2000e-003	2.3600e-003	0.0295	1.2000e-004	0.0138	1.0000e-004	0.0139	3.6600e-003	9.0000e-005	3.7500e-003	0.0000	11.1998	11.1998	1.9000e-004	0.0000	11.2046
Total	**6.1900e-003**	**0.0814**	**0.0590**	**3.5000e-004**	**0.0196**	**2.1000e-004**	**0.0198**	**5.3600e-003**	**2.0000e-004**	**5.5600e-003**	**0.0000**	**34.6484**	**34.6484**	**3.3300e-003**	**0.0000**	**34.7317**

3.23 Phase 1-TH (No HD Equipment2) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.8000e-004	0.0118	0.0246	4.0000e-005		2.1000e-004	2.1000e-004		1.9000e-004	1.9000e-004	0.0000	3.3193	3.3193	1.0700e-003	0.0000	3.3462
Total	**7.8000e-004**	**0.0118**	**0.0246**	**4.0000e-005**		**2.1000e-004**	**2.1000e-004**		**1.9000e-004**	**1.9000e-004**	**0.0000**	**3.3193**	**3.3193**	**1.0700e-003**	**0.0000**	**3.3462**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4700e-003	0.1777	0.0665	5.1000e-004	0.0132	2.5000e-004	0.0135	3.8300e-003	2.4000e-004	4.0700e-003	0.0000	52.7594	52.7594	7.0700e-003	0.0000	52.9361
Worker	9.4600e-003	5.3000e-003	0.0664	2.8000e-004	0.0309	2.3000e-004	0.0312	8.2300e-003	2.1000e-004	8.4400e-003	0.0000	25.1995	25.1995	4.3000e-004	0.0000	25.2103
Total	**0.0139**	**0.1830**	**0.1328**	**7.9000e-004**	**0.0442**	**4.8000e-004**	**0.0447**	**0.0121**	**4.5000e-004**	**0.0125**	**0.0000**	**77.9589**	**77.9589**	**7.5000e-003**	**0.0000**	**78.1464**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	4.0000e-005		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**4.0000e-005**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4700e-003	0.1777	0.0665	5.1000e-004	0.0132	2.5000e-004	0.0135	3.8300e-003	2.4000e-004	4.0700e-003	0.0000	52.7594	52.7594	7.0700e-003	0.0000	52.9361
Worker	9.4600e-003	5.3000e-003	0.0664	2.8000e-004	0.0309	2.3000e-004	0.0312	8.2300e-003	2.1000e-004	8.4400e-003	0.0000	25.1995	25.1995	4.3000e-004	0.0000	25.2103
Total	**0.0139**	**0.1830**	**0.1328**	**7.9000e-004**	**0.0442**	**4.8000e-004**	**0.0447**	**0.0121**	**4.5000e-004**	**0.0125**	**0.0000**	**77.9589**	**77.9589**	**7.5000e-003**	**0.0000**	**78.1464**

3.24 Phase 2-Material Off-Haul (No HD Equipment) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.1000e-004	0.0124	0.0257	4.0000e-005		2.1000e-004	2.1000e-004		2.0000e-004	2.0000e-004	0.0000	3.4669	3.4669	1.1200e-003	0.0000	3.4949
Total	**8.1000e-004**	**0.0124**	**0.0257**	**4.0000e-005**		**2.1000e-004**	**2.1000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**3.4669**	**3.4669**	**1.1200e-003**	**0.0000**	**3.4949**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0274	1.0833	0.5763	3.8800e-003	0.0876	2.2300e-003	0.0899	0.0241	2.1300e-003	0.0262	0.0000	426.2822	426.2822	0.0848	0.0000	428.4016
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total	**0.0274**	**1.0833**	**0.5763**	**3.8800e-003**	**0.0876**	**2.2300e-003**	**0.0899**	**0.0241**	**2.1300e-003**	**0.0262**	**0.0000**	**426.2822**	**426.2822**	**0.0848**	**0.0000**	**428.4016**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	4.0000e-005		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**4.0000e-005**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0274	1.0833	0.5763	3.8800e-003	0.0876	2.2300e-003	0.0899	0.0241	2.1300e-003	0.0262	0.0000	426.2822	426.2822	0.0848	0.0000	428.4016
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0274**	**1.0833**	**0.5763**	**3.8800e-003**	**0.0876**	**2.2300e-003**	**0.0899**	**0.0241**	**2.1300e-003**	**0.0262**	**0.0000**	**426.2822**	**426.2822**	**0.0848**	**0.0000**	**428.4016**

3.25 Phase 2-G,A,H (HD Equipment Mix) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0978	0.7948	1.1012	2.4900e-003		0.0332	0.0332		0.0325	0.0325	0.0000	215.7900	215.7900	0.0385	0.0000	216.7524
Total	**0.0978**	**0.7948**	**1.1012**	**2.4900e-003**		**0.0332**	**0.0332**		**0.0325**	**0.0325**	**0.0000**	**215.7900**	**215.7900**	**0.0385**	**0.0000**	**216.7524**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0192	0.7636	0.2855	2.1800e-003	0.0569	1.0800e-003	0.0579	0.0164	1.0300e-003	0.0175	0.0000	226.6698	226.6698	0.0304	0.0000	227.4290
Worker	0.0410	0.0230	0.2876	1.2100e-003	0.1341	9.8000e-004	0.1350	0.0357	9.0000e-004	0.0366	0.0000	109.1979	109.1979	1.8800e-003	0.0000	109.2448
Total	**0.0602**	**0.7866**	**0.5731**	**3.3900e-003**	**0.1909**	**2.0600e-003**	**0.1930**	**0.0521**	**1.9300e-003**	**0.0540**	**0.0000**	**335.8677**	**335.8677**	**0.0323**	**0.0000**	**336.6738**

Mitigated Construction On-Site

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

Off-Road	0.0447	0.8324	1.4726	2.4900e-003		7.7700e-003	7.7700e-003		7.7700e-003	7.7700e-003	0.0000	215.7898	215.7898	0.0385	0.0000	216.7521
Total	**0.0447**	**0.8324**	**1.4726**	**2.4900e-003**		**7.7700e-003**	**7.7700e-003**		**7.7700e-003**	**7.7700e-003**	**0.0000**	**215.7898**	**215.7898**	**0.0385**	**0.0000**	**216.7521**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0192	0.7636	0.2855	2.1800e-003	0.0569	1.0800e-003	0.0579	0.0164	1.0300e-003	0.0175	0.0000	226.6698	226.6698	0.0304	0.0000	227.4290
Worker	0.0410	0.0230	0.2876	1.2100e-003	0.1341	9.8000e-004	0.1350	0.0357	9.0000e-004	0.0366	0.0000	109.1979	109.1979	1.8800e-003	0.0000	109.2448
Total	**0.0602**	**0.7866**	**0.5731**	**3.3900e-003**	**0.1909**	**2.0600e-003**	**0.1930**	**0.0521**	**1.9300e-003**	**0.0540**	**0.0000**	**335.8677**	**335.8677**	**0.0323**	**0.0000**	**336.6738**

3.25 Phase 2-G,A,H (HD Equipment Mix) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0677	0.5398	0.8087	1.8300e-003		0.0212	0.0212		0.0207	0.0207	0.0000	158.8172	158.8172	0.0281	0.0000	159.5197
Total	**0.0677**	**0.5398**	**0.8087**	**1.8300e-003**		**0.0212**	**0.0212**		**0.0207**	**0.0207**	**0.0000**	**158.8172**	**158.8172**	**0.0281**	**0.0000**	**159.5197**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0136	0.5480	0.2103	1.5800e-003	0.0418	7.6000e-004	0.0426	0.0121	7.3000e-004	0.0128	0.0000	165.2190	165.2190	0.0223	0.0000	165.7774
Worker	0.0288	0.0155	0.1977	8.5000e-004	0.0986	7.1000e-004	0.0993	0.0262	6.6000e-004	0.0269	0.0000	77.0437	77.0437	1.2600e-003	0.0000	77.0752
Total	**0.0424**	**0.5635**	**0.4080**	**2.4300e-003**	**0.1404**	**1.4700e-003**	**0.1419**	**0.0383**	**1.3900e-003**	**0.0397**	**0.0000**	**242.2627**	**242.2627**	**0.0236**	**0.0000**	**242.8527**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0329	0.6123	1.0833	1.8300e-003		5.7200e-003	5.7200e-003		5.7200e-003	5.7200e-003	0.0000	158.8170	158.8170	0.0281	0.0000	159.5195
Total	**0.0329**	**0.6123**	**1.0833**	**1.8300e-003**		**5.7200e-003**	**5.7200e-003**		**5.7200e-003**	**5.7200e-003**	**0.0000**	**158.8170**	**158.8170**	**0.0281**	**0.0000**	**159.5195**

Mitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0136	0.5480	0.2103	1.5800e-003	0.0418	7.6000e-004	0.0426	0.0121	7.3000e-004	0.0128	0.0000	165.2190	165.2190	0.0223	0.0000	165.7774
Worker	0.0288	0.0155	0.1977	8.5000e-004	0.0986	7.1000e-004	0.0993	0.0262	6.6000e-004	0.0269	0.0000	77.0437	77.0437	1.2600e-003	0.0000	77.0752
Total	**0.0424**	**0.5635**	**0.4080**	**2.4300e-003**	**0.1404**	**1.4700e-003**	**0.1419**	**0.0383**	**1.3900e-003**	**0.0397**	**0.0000**	**242.2627**	**242.2627**	**0.0236**	**0.0000**	**242.8527**

3.26 Phase 2-B/Parking Structure (HD Equipment Mix) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0708	0.5729	0.7915	1.8700e-003		0.0236	0.0236		0.0230	0.0230	0.0000	161.6886	161.6886	0.0313	0.0000	162.4721
Total	**0.0708**	**0.5729**	**0.7915**	**1.8700e-003**		**0.0236**	**0.0236**		**0.0230**	**0.0230**	**0.0000**	**161.6886**	**161.6886**	**0.0313**	**0.0000**	**162.4721**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.2500e-003	0.3284	0.1228	9.4000e-004	0.0245	4.6000e-004	0.0249	7.0700e-003	4.4000e-004	7.5100e-003	0.0000	97.4680	97.4680	0.0131	0.0000	97.7945
Worker	0.0204	0.0114	0.1431	6.0000e-004	0.0667	4.9000e-004	0.0672	0.0177	4.5000e-004	0.0182	0.0000	54.3189	54.3189	9.3000e-004	0.0000	54.3423

Total	**0.0286**	**0.3398**	**0.2658**	**1.5400e-003**	**0.0911**	**9.5000e-004**	**0.0921**	**0.0248**	**8.9000e-004**	**0.0257**	**0.0000**	**151.7870**	**151.7870**	**0.0140**	**0.0000**	**152.1368**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0333	0.6153	1.0938	1.8700e-003		6.0600e-003	6.0600e-003		6.0600e-003	6.0600e-003	0.0000	161.6884	161.6884	0.0313	0.0000	162.4719
Total	**0.0333**	**0.6153**	**1.0938**	**1.8700e-003**		**6.0600e-003**	**6.0600e-003**		**6.0600e-003**	**6.0600e-003**	**0.0000**	**161.6884**	**161.6884**	**0.0313**	**0.0000**	**162.4719**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.2500e-003	0.3284	0.1228	9.4000e-004	0.0245	4.6000e-004	0.0249	7.0700e-003	4.4000e-004	7.5100e-003	0.0000	97.4680	97.4680	0.0131	0.0000	97.7945
Worker	0.0204	0.0114	0.1431	6.0000e-004	0.0667	4.9000e-004	0.0672	0.0177	4.5000e-004	0.0182	0.0000	54.3189	54.3189	9.3000e-004	0.0000	54.3423
Total	**0.0286**	**0.3398**	**0.2658**	**1.5400e-003**	**0.0911**	**9.5000e-004**	**0.0921**	**0.0248**	**8.9000e-004**	**0.0257**	**0.0000**	**151.7870**	**151.7870**	**0.0140**	**0.0000**	**152.1368**

3.26 Phase 2-B/Parking Structure (HD Equipment Mix) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0491	0.3885	0.5812	1.3700e-003		0.0151	0.0151		0.0147	0.0147	0.0000	119.0064	119.0064	0.0229	0.0000	119.5793
Total	**0.0491**	**0.3885**	**0.5812**	**1.3700e-003**		**0.0151**	**0.0151**		**0.0147**	**0.0147**	**0.0000**	**119.0064**	**119.0064**	**0.0229**	**0.0000**	**119.5793**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.8500e-003	0.2357	0.0904	6.8000e-004	0.0180	3.3000e-004	0.0183	5.2000e-003	3.1000e-004	5.5100e-003	0.0000	71.0442	71.0442	9.6100e-003	0.0000	71.2843
Worker	0.0143	7.7000e-003	0.0983	4.2000e-004	0.0491	3.5000e-004	0.0494	0.0131	3.3000e-004	0.0134	0.0000	38.3243	38.3243	6.3000e-004	0.0000	38.3400
Total	**0.0202**	**0.2434**	**0.1888**	**1.1000e-003**	**0.0670**	**6.8000e-004**	**0.0677**	**0.0183**	**6.4000e-004**	**0.0189**	**0.0000**	**109.3685**	**109.3685**	**0.0102**	**0.0000**	**109.6243**

Mitigated Construction On-Site

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

Off-Road	0.0245	0.4526	0.8047	1.3700e-003		4.4600e-003	4.4600e-003		4.4600e-003	4.4600e-003	0.0000	119.0063	119.0063	0.0229	0.0000	119.5792
Total	**0.0245**	**0.4526**	**0.8047**	**1.3700e-003**		**4.4600e-003**	**4.4600e-003**		**4.4600e-003**	**4.4600e-003**	**0.0000**	**119.0063**	**119.0063**	**0.0229**	**0.0000**	**119.5792**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.8500e-003	0.2357	0.0904	6.8000e-004	0.0180	3.3000e-004	0.0183	5.2000e-003	3.1000e-004	5.5100e-003	0.0000	71.0442	71.0442	9.6100e-003	0.0000	71.2843
Worker	0.0143	7.7000e-003	0.0983	4.2000e-004	0.0491	3.5000e-004	0.0494	0.0131	3.3000e-004	0.0134	0.0000	38.3243	38.3243	6.3000e-004	0.0000	38.3400
Total	**0.0202**	**0.2434**	**0.1888**	**1.1000e-003**	**0.0670**	**6.8000e-004**	**0.0677**	**0.0183**	**6.4000e-004**	**0.0189**	**0.0000**	**109.3685**	**109.3685**	**0.0102**	**0.0000**	**109.6243**

3.27 Phase 2-G,A,H (Electric Cranes Only) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0924	0.9361	0.5131	1.7100e-003		0.0398	0.0398		0.0366	0.0366	0.0000	149.8063	149.8063	0.0485	0.0000	151.0175
Total	**0.0924**	**0.9361**	**0.5131**	**1.7100e-003**		**0.0398**	**0.0398**		**0.0366**	**0.0366**	**0.0000**	**149.8063**	**149.8063**	**0.0485**	**0.0000**	**151.0175**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0419	1.6869	0.6473	4.8700e-003	0.1288	2.3400e-003	0.1311	0.0372	2.2400e-003	0.0395	0.0000	508.5646	508.5646	0.0688	0.0000	510.2837
Worker	0.0887	0.0477	0.6086	2.6200e-003	0.3036	2.1900e-003	0.3057	0.0808	2.0200e-003	0.0828	0.0000	237.1502	237.1502	3.8800e-003	0.0000	237.2472
Total	**0.1306**	**1.7345**	**1.2558**	**7.4900e-003**	**0.4323**	**4.5300e-003**	**0.4368**	**0.1180**	**4.2600e-003**	**0.1222**	**0.0000**	**745.7148**	**745.7148**	**0.0726**	**0.0000**	**747.5309**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	1.7100e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**1.7100e-003**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0419	1.6869	0.6473	4.8700e-003	0.1288	2.3400e-003	0.1311	0.0372	2.2400e-003	0.0395	0.0000	508.5646	508.5646	0.0688	0.0000	510.2837
Worker	0.0887	0.0477	0.6086	2.6200e-003	0.3036	2.1900e-003	0.3057	0.0808	2.0200e-003	0.0828	0.0000	237.1502	237.1502	3.8800e-003	0.0000	237.2472
Total	**0.1306**	**1.7345**	**1.2558**	**7.4900e-003**	**0.4323**	**4.5300e-003**	**0.4368**	**0.1180**	**4.2600e-003**	**0.1222**	**0.0000**	**745.7148**	**745.7148**	**0.0726**	**0.0000**	**747.5309**

3.27 Phase 2-G,A,H (Electric Cranes Only) - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1225	1.2403	0.6798	2.2600e-003		0.0527	0.0527		0.0485	0.0485	0.0000	198.4743	198.4743	0.0642	0.0000	200.0791
Total	**0.1225**	**1.2403**	**0.6798**	**2.2600e-003**		**0.0527**	**0.0527**		**0.0485**	**0.0485**	**0.0000**	**198.4743**	**198.4743**	**0.0642**	**0.0000**	**200.0791**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0539	2.1808	0.8652	6.3700e-003	0.1706	2.9600e-003	0.1736	0.0493	2.8300e-003	0.0521	0.0000	667.8685	667.8685	0.0912	0.0000	670.1483
Worker	0.1127	0.0582	0.7575	3.3400e-003	0.4022	2.8300e-003	0.4050	0.1070	2.6000e-003	0.1096	0.0000	302.5824	302.5824	4.7200e-003	0.0000	302.7003

Total	**0.1666**	**2.2389**	**1.6228**	**9.7100e-003**	**0.5728**	**5.7900e-003**	**0.5786**	**0.1563**	**5.4300e-003**	**0.1617**	**0.0000**	**970.4508**	**970.4508**	**0.0959**	**0.0000**	**972.8485**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	2.2600e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**2.2600e-003**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0539	2.1808	0.8652	6.3700e-003	0.1706	2.9600e-003	0.1736	0.0493	2.8300e-003	0.0521	0.0000	667.8685	667.8685	0.0912	0.0000	670.1483
Worker	0.1127	0.0582	0.7575	3.3400e-003	0.4022	2.8300e-003	0.4050	0.1070	2.6000e-003	0.1096	0.0000	302.5824	302.5824	4.7200e-003	0.0000	302.7003
Total	**0.1666**	**2.2389**	**1.6228**	**9.7100e-003**	**0.5728**	**5.7900e-003**	**0.5786**	**0.1563**	**5.4300e-003**	**0.1617**	**0.0000**	**970.4508**	**970.4508**	**0.0959**	**0.0000**	**972.8485**

3.27 Phase 2-G,A,H (Electric Cranes Only) - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8500e-003	0.0998	0.0547	1.8000e-004		4.2400e-003	4.2400e-003		3.9000e-003	3.9000e-003	0.0000	15.9692	15.9692	5.1600e-003	0.0000	16.0983
Total	**9.8500e-003**	**0.0998**	**0.0547**	**1.8000e-004**		**4.2400e-003**	**4.2400e-003**		**3.9000e-003**	**3.9000e-003**	**0.0000**	**15.9692**	**15.9692**	**5.1600e-003**	**0.0000**	**16.0983**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2200e-003	0.1713	0.0702	5.1000e-004	0.0137	2.3000e-004	0.0140	3.9700e-003	2.2000e-004	4.1800e-003	0.0000	53.2819	53.2819	7.3500e-003	0.0000	53.4655
Worker	8.6900e-003	4.3300e-003	0.0575	2.6000e-004	0.0324	2.2000e-004	0.0326	8.6100e-003	2.0000e-004	8.8100e-003	0.0000	23.5276	23.5276	3.5000e-004	0.0000	23.5363
Total	**0.0129**	**0.1756**	**0.1277**	**7.7000e-004**	**0.0461**	**4.5000e-004**	**0.0465**	**0.0126**	**4.2000e-004**	**0.0130**	**0.0000**	**76.8095**	**76.8095**	**7.7000e-003**	**0.0000**	**77.0019**

Mitigated Construction On-Site

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

Off-Road	0.0000	0.0000	0.0000	1.8000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**1.8000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.2200e-003	0.1713	0.0702	5.1000e-004	0.0137	2.3000e-004	0.0140	3.9700e-003	2.2000e-004	4.1800e-003	0.0000	53.2819	53.2819	7.3500e-003	0.0000	53.4655
Worker	8.6900e-003	4.3300e-003	0.0575	2.6000e-004	0.0324	2.2000e-004	0.0326	8.6100e-003	2.0000e-004	8.8100e-003	0.0000	23.5276	23.5276	3.5000e-004	0.0000	23.5363
Total	**0.0129**	**0.1756**	**0.1277**	**7.7000e-004**	**0.0461**	**4.5000e-004**	**0.0465**	**0.0126**	**4.2000e-004**	**0.0130**	**0.0000**	**76.8095**	**76.8095**	**7.7000e-003**	**0.0000**	**77.0019**

3.28 Phase 2-B/Parking Structure (Electric Cranes Only) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0616	0.6241	0.3421	1.1400e-003		0.0265	0.0265		0.0244	0.0244	0.0000	99.8709	99.8709	0.0323	0.0000	100.6784
Total	**0.0616**	**0.6241**	**0.3421**	**1.1400e-003**		**0.0265**	**0.0265**		**0.0244**	**0.0244**	**0.0000**	**99.8709**	**99.8709**	**0.0323**	**0.0000**	**100.6784**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0180	0.7254	0.2783	2.0900e-003	0.0554	1.0100e-003	0.0564	0.0160	9.6000e-004	0.0170	0.0000	218.6828	218.6828	0.0296	0.0000	219.4220
Worker	0.0441	0.0237	0.3027	1.3000e-003	0.1510	1.0900e-003	0.1521	0.0402	1.0000e-003	0.0412	0.0000	117.9670	117.9670	1.9300e-003	0.0000	118.0153
Total	**0.0621**	**0.7491**	**0.5810**	**3.3900e-003**	**0.2064**	**2.1000e-003**	**0.2085**	**0.0562**	**1.9600e-003**	**0.0581**	**0.0000**	**336.6498**	**336.6498**	**0.0315**	**0.0000**	**337.4373**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	1.1400e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**1.1400e-003**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0180	0.7254	0.2783	2.0900e-003	0.0554	1.0100e-003	0.0564	0.0160	9.6000e-004	0.0170	0.0000	218.6828	218.6828	0.0296	0.0000	219.4220
Worker	0.0441	0.0237	0.3027	1.3000e-003	0.1510	1.0900e-003	0.1521	0.0402	1.0000e-003	0.0412	0.0000	117.9670	117.9670	1.9300e-003	0.0000	118.0153
Total	**0.0621**	**0.7491**	**0.5810**	**3.3900e-003**	**0.2064**	**2.1000e-003**	**0.2085**	**0.0562**	**1.9600e-003**	**0.0581**	**0.0000**	**336.6498**	**336.6498**	**0.0315**	**0.0000**	**337.4373**

3.28 Phase 2-B/Parking Structure (Electric Cranes Only) - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0269	0.2724	0.1493	5.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	43.5984	43.5984	0.0141	0.0000	43.9510
Total	**0.0269**	**0.2724**	**0.1493**	**5.0000e-004**		**0.0116**	**0.0116**		**0.0107**	**0.0107**	**0.0000**	**43.5984**	**43.5984**	**0.0141**	**0.0000**	**43.9510**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.6300e-003	0.3090	0.1226	9.0000e-004	0.0242	4.2000e-004	0.0246	6.9900e-003	4.0000e-004	7.3900e-003	0.0000	94.6275	94.6275	0.0129	0.0000	94.9505
Worker	0.0185	9.5300e-003	0.1242	5.5000e-004	0.0659	4.6000e-004	0.0664	0.0175	4.3000e-004	0.0180	0.0000	49.5951	49.5951	7.7000e-004	0.0000	49.6144

Total	**0.0261**	**0.3185**	**0.2468**	**1.4500e-003**	**0.0901**	**8.8000e-004**	**0.0910**	**0.0245**	**8.3000e-004**	**0.0254**	**0.0000**	**144.2226**	**144.2226**	**0.0137**	**0.0000**	**144.5649**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	5.0000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**5.0000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.6300e-003	0.3090	0.1226	9.0000e-004	0.0242	4.2000e-004	0.0246	6.9900e-003	4.0000e-004	7.3900e-003	0.0000	94.6275	94.6275	0.0129	0.0000	94.9505
Worker	0.0185	9.5300e-003	0.1242	5.5000e-004	0.0659	4.6000e-004	0.0664	0.0175	4.3000e-004	0.0180	0.0000	49.5951	49.5951	7.7000e-004	0.0000	49.6144
Total	**0.0261**	**0.3185**	**0.2468**	**1.4500e-003**	**0.0901**	**8.8000e-004**	**0.0910**	**0.0245**	**8.3000e-004**	**0.0254**	**0.0000**	**144.2226**	**144.2226**	**0.0137**	**0.0000**	**144.5649**

3.29 Phase 2-B/Parking Structure Architectural Coatings - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0244					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0150	0.1008	0.1592	2.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003	0.0000	22.4686	22.4686	1.2300e-003	0.0000	22.4993
Total	**0.0395**	**0.1008**	**0.1592**	**2.6000e-004**		**4.5300e-003**	**4.5300e-003**		**4.5300e-003**	**4.5300e-003**	**0.0000**	**22.4686**	**22.4686**	**1.2300e-003**	**0.0000**	**22.4993**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	1.5200e-003	8.5000e-004	1.0000e-005	2.5000e-004	0.0000	2.5000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.5994	0.5994	1.2000e-004	0.0000	0.6025
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0148	7.9400e-003	0.1014	4.4000e-004	0.0506	3.7000e-004	0.0510	0.0135	3.4000e-004	0.0138	0.0000	39.5220	39.5220	6.5000e-004	0.0000	39.5381
Total	**0.0148**	**9.4600e-003**	**0.1023**	**4.5000e-004**	**0.0508**	**3.7000e-004**	**0.0512**	**0.0135**	**3.4000e-004**	**0.0139**	**0.0000**	**40.1214**	**40.1214**	**7.7000e-004**	**0.0000**	**40.1406**

Mitigated Construction On-Site

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

Archit. Coating	0.0244					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.7900e-003	0.0933	0.1613	2.6000e-004		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	22.4686	22.4686	1.2300e-003	0.0000	22.4993
Total	**0.0292**	**0.0933**	**0.1613**	**2.6000e-004**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**22.4686**	**22.4686**	**1.2300e-003**	**0.0000**	**22.4993**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	1.5200e-003	8.5000e-004	1.0000e-005	2.5000e-004	0.0000	2.5000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.5994	0.5994	1.2000e-004	0.0000	0.6025
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0148	7.9400e-003	0.1014	4.4000e-004	0.0506	3.7000e-004	0.0510	0.0135	3.4000e-004	0.0138	0.0000	39.5220	39.5220	6.5000e-004	0.0000	39.5381
Total	**0.0148**	**9.4600e-003**	**0.1023**	**4.5000e-004**	**0.0508**	**3.7000e-004**	**0.0512**	**0.0135**	**3.4000e-004**	**0.0139**	**0.0000**	**40.1214**	**40.1214**	**7.7000e-004**	**0.0000**	**40.1406**

3.29 Phase 2-B/Parking Structure Architectural Coatings - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0319					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0196	0.1314	0.2075	3.4000e-004		5.9100e-003	5.9100e-003		5.9100e-003	5.9100e-003	0.0000	29.2773	29.2773	1.6000e-003	0.0000	29.3172
Total	**0.0514**	**0.1314**	**0.2075**	**3.4000e-004**		**5.9100e-003**	**5.9100e-003**		**5.9100e-003**	**5.9100e-003**	**0.0000**	**29.2773**	**29.2773**	**1.6000e-003**	**0.0000**	**29.3172**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.8900e-003	1.1400e-003	1.0000e-005	2.5000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.7721	0.7721	1.6000e-004	0.0000	0.7761
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0185	9.5300e-003	0.1242	5.5000e-004	0.0659	4.6000e-004	0.0664	0.0175	4.3000e-004	0.0180	0.0000	49.5951	49.5951	7.7000e-004	0.0000	49.6144
Total	**0.0185**	**0.0114**	**0.1253**	**5.6000e-004**	**0.0662**	**4.6000e-004**	**0.0666**	**0.0176**	**4.3000e-004**	**0.0180**	**0.0000**	**50.3672**	**50.3672**	**9.3000e-004**	**0.0000**	**50.3906**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0319					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.2500e-003	0.1215	0.2101	3.4000e-004		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	29.2773	29.2773	1.6000e-003	0.0000	29.3172
Total	**0.0381**	**0.1215**	**0.2101**	**3.4000e-004**		**4.5000e-004**	**4.5000e-004**		**4.5000e-004**	**4.5000e-004**	**0.0000**	**29.2773**	**29.2773**	**1.6000e-003**	**0.0000**	**29.3172**

Mitigated Construction Off-Site

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

Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.8900e-003	1.1400e-003	1.0000e-005	2.5000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.7721	0.7721	1.6000e-004	0.0000	0.7761
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0185	9.5300e-003	0.1242	5.5000e-004	0.0659	4.6000e-004	0.0664	0.0175	4.3000e-004	0.0180	0.0000	49.5951	49.5951	7.7000e-004	0.0000	49.6144
Total	**0.0185**	**0.0114**	**0.1253**	**5.6000e-004**	**0.0662**	**4.6000e-004**	**0.0666**	**0.0176**	**4.3000e-004**	**0.0180**	**0.0000**	**50.3672**	**50.3672**	**9.3000e-004**	**0.0000**	**50.3906**

3.30 Phase 2-G,A,H Architectural Coatings - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2414					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0598	0.4009	0.6332	1.0400e-003		0.0180	0.0180		0.0180	0.0180	0.0000	89.3639	89.3639	4.8700e-003	0.0000	89.4858
Total	**0.3012**	**0.4009**	**0.6332**	**1.0400e-003**		**0.0180**	**0.0180**		**0.0180**	**0.0180**	**0.0000**	**89.3639**	**89.3639**	**4.8700e-003**	**0.0000**	**89.4858**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0756	0.0390	0.5079	2.2400e-003	0.2697	1.9000e-003	0.2715	0.0717	1.7400e-003	0.0735	0.0000	202.8809	202.8809	3.1600e-003	0.0000	202.9600

Total	**0.0756**	**0.0390**	**0.5079**	**2.2400e-003**	**0.2697**	**1.9000e-003**	**0.2715**	**0.0717**	**1.7400e-003**	**0.0735**	**0.0000**	**202.8809**	**202.8809**	**3.1600e-003**	**0.0000**	**202.9600**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2414					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0191	0.3709	0.6413	1.0400e-003		1.3900e-003	1.3900e-003		1.3900e-003	1.3900e-003	0.0000	89.3638	89.3638	4.8700e-003	0.0000	89.4856
Total	**0.2604**	**0.3709**	**0.6413**	**1.0400e-003**		**1.3900e-003**	**1.3900e-003**		**1.3900e-003**	**1.3900e-003**	**0.0000**	**89.3638**	**89.3638**	**4.8700e-003**	**0.0000**	**89.4856**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0756	0.0390	0.5079	2.2400e-003	0.2697	1.9000e-003	0.2715	0.0717	1.7400e-003	0.0735	0.0000	202.8809	202.8809	3.1600e-003	0.0000	202.9600
Total	**0.0756**	**0.0390**	**0.5079**	**2.2400e-003**	**0.2697**	**1.9000e-003**	**0.2715**	**0.0717**	**1.7400e-003**	**0.0735**	**0.0000**	**202.8809**	**202.8809**	**3.1600e-003**	**0.0000**	**202.9600**

3.30 Phase 2-G,A,H Architectural Coatings - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0290					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.1800e-003	0.0481	0.0760	1.2000e-004		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003	0.0000	10.7237	10.7237	5.8000e-004	0.0000	10.7383
Total	**0.0361**	**0.0481**	**0.0760**	**1.2000e-004**		**2.1600e-003**	**2.1600e-003**		**2.1600e-003**	**2.1600e-003**	**0.0000**	**10.7237**	**10.7237**	**5.8000e-004**	**0.0000**	**10.7383**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.6900e-003	4.3300e-003	0.0575	2.6000e-004	0.0324	2.2000e-004	0.0326	8.6100e-003	2.0000e-004	8.8100e-003	0.0000	23.5276	23.5276	3.5000e-004	0.0000	23.5363
Total	**8.6900e-003**	**4.3300e-003**	**0.0575**	**2.6000e-004**	**0.0324**	**2.2000e-004**	**0.0326**	**8.6100e-003**	**2.0000e-004**	**8.8100e-003**	**0.0000**	**23.5276**	**23.5276**	**3.5000e-004**	**0.0000**	**23.5363**

Mitigated Construction On-Site

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

Archit. Coating	0.0290					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2900e-003	0.0445	0.0770	1.2000e-004		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	10.7237	10.7237	5.8000e-004	0.0000	10.7383
Total	**0.0313**	**0.0445**	**0.0770**	**1.2000e-004**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**	**0.0000**	**10.7237**	**10.7237**	**5.8000e-004**	**0.0000**	**10.7383**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.6900e-003	4.3300e-003	0.0575	2.6000e-004	0.0324	2.2000e-004	0.0326	8.6100e-003	2.0000e-004	8.8100e-003	0.0000	23.5276	23.5276	3.5000e-004	0.0000	23.5363
Total	**8.6900e-003**	**4.3300e-003**	**0.0575**	**2.6000e-004**	**0.0324**	**2.2000e-004**	**0.0326**	**8.6100e-003**	**2.0000e-004**	**8.8100e-003**	**0.0000**	**23.5276**	**23.5276**	**3.5000e-004**	**0.0000**	**23.5363**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.7064	6.6091	18.8178	0.0711	6.6104	0.0753	6.6857	1.7802	0.0704	1.8506	0.0000	6,548.0841	6,548.0841	0.2712	0.0000	6,554.8628

Unmitigated	1.7064	6.6091	18.8178	0.0711	6.6104	0.0753	6.6857	1.7802	0.0704	1.8506	0.0000	6,548.0841	6,548.0841	0.2712	0.0000	6,554.8628

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	7,315.00	7,029.00	6446.00	16,513,692	16,513,692
City Park	7.56	91.00	66.96	59,703	59,703
Day-Care Center	740.60	62.10	58.30	643,221	643,221
Enclosed Parking with Elevator	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Strip Mall	332.40	315.30	153.23	468,726	468,726
Total	8,395.56	7,497.40	6,724.49	17,685,341	17,685,341

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Day-Care Center	9.50	7.30	7.30	12.70	82.30	5.00	28	58	14
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.604697	0.038136	0.192426	0.089922	0.013708	0.005077	0.031210	0.009257	0.004288	0.003553	0.006262	0.000945	0.000519
City Park	0.604697	0.038136	0.192426	0.089922	0.013708	0.005077	0.031210	0.009257	0.004288	0.003553	0.006262	0.000945	0.000519
Day-Care Center	0.604697	0.038136	0.192426	0.089922	0.013708	0.005077	0.031210	0.009257	0.004288	0.003553	0.006262	0.000945	0.000519
Enclosed Parking with Elevator	0.604697	0.038136	0.192426	0.089922	0.013708	0.005077	0.031210	0.009257	0.004288	0.003553	0.006262	0.000945	0.000519
Other Asphalt Surfaces	0.604697	0.038136	0.192426	0.089922	0.013708	0.005077	0.031210	0.009257	0.004288	0.003553	0.006262	0.000945	0.000519
Strip Mall	0.604697	0.038136	0.192426	0.089922	0.013708	0.005077	0.031210	0.009257	0.004288	0.003553	0.006262	0.000945	0.000519

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,966.2715	1,966.2715	0.0889	0.0184	1,973.9759
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,966.2715	1,966.2715	0.0889	0.0184	1,973.9759
NaturalGas Mitigated	0.0529	0.4523	0.1965	2.8800e-003		0.0365	0.0365		0.0365	0.0365	0.0000	523.1080	523.1080	0.0100	9.5900e-003	526.2165
NaturalGas Unmitigated	0.0529	0.4523	0.1965	2.8800e-003		0.0365	0.0365		0.0365	0.0365	0.0000	523.1080	523.1080	0.0100	9.5900e-003	526.2165

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	9.60347e+006	0.0518	0.4425	0.1883	2.8200e-003		0.0358	0.0358		0.0358	0.0358	0.0000	512.4779	512.4779	9.8200e-003	9.4000e-003	515.5233
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	164700	8.9000e-004	8.0700e-003	6.7800e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7890	8.7890	1.7000e-004	1.6000e-004	8.8413
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Strip Mall	34500	1.9000e-004	1.6900e-003	1.4200e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	1.8411	1.8411	4.0000e-005	3.0000e-005	1.8520
Total		**0.0529**	**0.4523**	**0.1965**	**2.8800e-003**		**0.0365**	**0.0365**		**0.0365**	**0.0365**	**0.0000**	**523.1080**	**523.1080**	**0.0100**	**9.5900e-003**	**526.2165**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	9.60347e+006	0.0518	0.4425	0.1883	2.8200e-003		0.0358	0.0358		0.0358	0.0358	0.0000	512.4779	512.4779	9.8200e-003	9.4000e-003	515.5233
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	164700	8.9000e-004	8.0700e-003	6.7800e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7890	8.7890	1.7000e-004	1.6000e-004	8.8413
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	34500	1.9000e-004	1.6900e-003	1.4200e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	1.8411	1.8411	4.0000e-005	3.0000e-005	1.8520
Total		**0.0529**	**0.4523**	**0.1965**	**2.8800e-003**		**0.0365**	**0.0365**		**0.0365**	**0.0365**	**0.0000**	**523.1080**	**523.1080**	**0.0100**	**9.5900e-003**	**526.2165**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	4.64419e+006	1,351.0478	0.0611	0.0126	1,356.3416
City Park	0	0.0000	0.0000	0.0000	0.0000

Day-Care Center	44400	12.9165	5.8000e-004	1.2000e-004	12.9671
Enclosed Parking with Elevator	1.99181e+006	579.4415	0.0262	5.4200e-003	581.7120
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	78600	22.8656	1.0300e-003	2.1000e-004	22.9552
Total		**1,966.2715**	**0.0889**	**0.0184**	**1,973.9759**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	4.64419e+006	1,351.0478	0.0611	0.0126	1,356.3416
City Park	0	0.0000	0.0000	0.0000	0.0000
Day-Care Center	44400	12.9165	5.8000e-004	1.2000e-004	12.9671
Enclosed Parking with Elevator	1.99181e+006	579.4415	0.0262	5.4200e-003	581.7120
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	78600	22.8656	1.0300e-003	2.1000e-004	22.9552
Total		**1,966.2715**	**0.0889**	**0.0184**	**1,973.9759**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	8.8216	0.1526	11.6713	7.3900e-003		0.5450	0.5450		0.5450	0.5450	50.1487	33.9638	84.1125	0.0935	3.2900e-003	87.4291
Unmitigated	8.8216	0.1526	11.6713	7.3900e-003		0.5450	0.5450		0.5450	0.5450	50.1487	33.9638	84.1125	0.0935	3.2900e-003	87.4291

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.9230					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.1140					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.5380	0.0584	3.4949	6.9500e-003		0.4997	0.4997		0.4997	0.4997	50.1487	20.5985	70.7472	0.0806	3.2900e-003	73.7421
Landscaping	0.2466	0.0942	8.1764	4.3000e-004		0.0453	0.0453		0.0453	0.0453	0.0000	13.3654	13.3654	0.0129	0.0000	13.6869
Total	**8.8216**	**0.1526**	**11.6713**	**7.3800e-003**		**0.5450**	**0.5450**		**0.5450**	**0.5450**	**50.1487**	**33.9638**	**84.1125**	**0.0935**	**3.2900e-003**	**87.4291**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.9230					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	5.1140					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	2.5380	0.0584	3.4949	6.9500e-003		0.4997	0.4997		0.4997	0.4997	50.1487	20.5985	70.7472	0.0806	3.2900e-003	73.7421
Landscaping	0.2466	0.0942	8.1764	4.3000e-004		0.0453	0.0453		0.0453	0.0453	0.0000	13.3654	13.3654	0.0129	0.0000	13.6869
Total	**8.8216**	**0.1526**	**11.6713**	**7.3800e-003**		**0.5450**	**0.5450**		**0.5450**	**0.5450**	**50.1487**	**33.9638**	**84.1125**	**0.0935**	**3.2900e-003**	**87.4291**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	189.7428	2.3750	0.0575	266.2399
Unmitigated	189.7428	2.3750	0.0575	266.2399

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e

Land Use	Mgal	MT/yr			
Apartments Mid Rise	71.6694 / 45.1829	181.5586	2.3425	0.0566	256.9972
City Park	0 / 4.76593	4.8526	2.2000e-004	5.0000e-005	4.8716
Day-Care Center	0.428896 / 1.10287	1.9341	0.0141	3.5000e-004	2.3889
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.555544 / 0.340495	1.3974	0.0182	4.4000e-004	1.9822
Total		**189.7428**	**2.3750**	**0.0575**	**266.2399**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	71.6694 / 45.1829	181.5586	2.3425	0.0566	256.9972
City Park	0 / 4.76593	4.8526	2.2000e-004	5.0000e-005	4.8716
Day-Care Center	0.428896 / 1.10287	1.9341	0.0141	3.5000e-004	2.3889
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.555544 / 0.340495	1.3974	0.0182	4.4000e-004	1.9822
Total		**189.7428**	**2.3750**	**0.0575**	**266.2399**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	107.0209	6.3248	0.0000	265.1397
Unmitigated	107.0209	6.3248	0.0000	265.1397

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	506	102.7134	6.0702	0.0000	254.4682
City Park	0.34	0.0690	4.0800e-003	0.0000	0.1710
Day-Care Center	13	2.6389	0.1560	0.0000	6.5377
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	7.88	1.5996	0.0945	0.0000	3.9629
Total		**107.0209**	**6.3248**	**0.0000**	**265.1397**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	506	102.7134	6.0702	0.0000	254.4682
City Park	0.34	0.0690	4.0800e-003	0.0000	0.1710
Day-Care Center	13	2.6389	0.1560	0.0000	6.5377
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	7.88	1.5996	0.0945	0.0000	3.9629
Total		**107.0209**	**6.3248**	**0.0000**	**265.1397**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Balboa Reservoir-Mitigated Additional Housing Option Construction

San Francisco County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	10.00	1000sqft	0.00	10,000.00	0
Enclosed Parking with Elevator	650.00	Space	0.00	231,000.00	0
Other Asphalt Surfaces	4.00	Acre	4.00	174,240.00	0
City Park	4.00	Acre	4.00	174,240.00	0
Apartments Mid Rise	1,550.00	Dwelling Unit	13.00	1,588,000.00	4433
Strip Mall	7.50	1000sqft	0.00	7,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	4.6	**Precipitation Freq (Days)**	64
Climate Zone	5			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	641.35	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project Specific Information

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2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.9204	9.6554	6.2144	0.0181	0.2367	0.3687	0.6053	0.0355	0.3401	0.3756	0.0000	1,598.9047	1,598.9047	0.4748	0.0000	1,610.7750
2022	1.1311	12.1395	10.1501	0.0375	1.2953	0.2829	1.5783	0.3419	0.2711	0.6130	0.0000	3,522.5632	3,522.5632	0.5021	0.0000	3,535.1167
2023	1.0081	9.3636	6.9540	0.0327	1.5550	0.1683	1.7233	0.4229	0.1566	0.5796	0.0000	3,147.4351	3,147.4351	0.3916	0.0000	3,157.2239
2024	1.3557	9.5423	9.0078	0.0366	1.6056	0.1811	1.7866	0.4354	0.1732	0.6086	0.0000	3,525.8770	3,525.8770	0.4469	0.0000	3,537.0492
2025	0.7597	7.9261	6.4477	0.0293	1.3170	0.1337	1.4507	0.3589	0.1259	0.4848	0.0000	2,823.0942	2,823.0942	0.3602	0.0000	2,832.0982
2026	1.0565	6.4023	5.7467	0.0260	1.5005	0.1181	1.6187	0.4060	0.1111	0.5172	0.0000	2,497.4764	2,497.4764	0.2740	0.0000	2,504.3272
2027	0.0901	0.4585	0.4455	1.9500e-003	0.1202	8.9400e-003	0.1292	0.0325	8.4500e-003	0.0409	0.0000	186.7297	186.7297	0.0194	0.0000	187.2155
Maximum	**1.3557**	**12.1395**	**10.1501**	**0.0375**	**1.6056**	**0.3687**	**1.7866**	**0.4354**	**0.3401**	**0.6130**	**0.0000**	**3,525.8770**	**3,525.8770**	**0.5021**	**0.0000**	**3,537.0492**

Mitigated Construction

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

Year	tons/yr										MT/yr					
2021	0.2577	2.1197	8.4002	0.0181	0.2367	0.0288	0.2654	0.0355	0.0287	0.0642	0.0000	1,598.9029	1,598.9029	0.4748	0.0000	1,610.7731
2022	0.7092	10.2736	11.8591	0.0375	1.2953	0.0565	1.3519	0.3419	0.0555	0.3974	0.0000	3,414.0974	3,414.0974	0.4671	0.0000	3,425.7740
2023	0.6884	6.3407	5.7109	0.0327	1.5550	0.0205	1.5754	0.4229	0.0194	0.4424	0.0000	2,746.3293	2,746.3293	0.2618	0.0000	2,752.8750
2024	1.0426	8.1181	9.0765	0.0366	1.6056	0.0360	1.6415	0.4354	0.0349	0.4703	0.0000	3,312.5573	3,312.5573	0.3779	0.0000	3,322.0047
2025	0.5088	6.3080	6.0396	0.0293	1.3170	0.0253	1.3423	0.3589	0.0245	0.3834	0.0000	2,541.0280	2,541.0280	0.2689	0.0000	2,547.7513
2026	0.8154	4.5563	4.7731	0.0260	1.5005	0.0158	1.5163	0.4060	0.0149	0.4209	0.0000	2,209.5354	2,209.5354	0.1809	0.0000	2,214.0580
2027	0.0718	0.3305	0.3790	1.9500e-003	0.1202	1.2200e-003	0.1215	0.0325	1.1500e-003	0.0336	0.0000	166.9530	166.9530	0.0130	0.0000	167.2789
Maximum	**1.0426**	**10.2736**	**11.8591**	**0.0375**	**1.6056**	**0.0565**	**1.6415**	**0.4354**	**0.0555**	**0.4703**	**0.0000**	**3,414.0974**	**3,414.0974**	**0.4748**	**0.0000**	**3,425.7740**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**35.24**	**31.43**	**-2.83**	**0.00**	**0.00**	**85.42**	**12.12**	**0.00**	**84.91**	**31.29**	**0.00**	**7.59**	**7.59**	**17.19**	**0.00**	**7.62**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2021	5-31-2021	2.2557	0.5246
2	6-1-2021	8-31-2021	3.3783	0.7513
3	9-1-2021	11-30-2021	3.6439	0.8120
4	12-1-2021	2-28-2022	2.1313	0.5356
5	3-1-2022	5-31-2022	3.9953	3.6945
6	6-1-2022	8-31-2022	3.9236	3.6393
7	9-1-2022	11-30-2022	3.3428	2.5750
8	12-1-2022	2-28-2023	2.8251	1.9428
9	3-1-2023	5-31-2023	2.8380	1.9582
10	6-1-2023	8-31-2023	2.7335	1.8414
11	9-1-2023	11-30-2023	2.3842	1.5766
12	12-1-2023	2-29-2024	2.0816	1.4651
13	3-1-2024	5-31-2024	2.4157	1.7700

14	**6-1-2024**	**8-31-2024**	2.3170	1.6627
15	**9-1-2024**	**11-30-2024**	3.7853	3.7614
16	**12-1-2024**	**2-28-2025**	2.5615	2.6138
17	**3-1-2025**	**5-31-2025**	2.1825	1.7835
18	**6-1-2025**	**8-31-2025**	1.9848	1.3388
19	**9-1-2025**	**11-30-2025**	2.1054	1.4551
20	**12-1-2025**	**2-28-2026**	2.1272	1.4785
21	**3-1-2026**	**5-31-2026**	2.0060	1.4121
22	**6-1-2026**	**8-31-2026**	1.7290	1.2712
23	**9-1-2026**	**11-30-2026**	1.7290	1.2762
24	**12-1-2026**	**2-28-2027**	1.1749	0.8664
		Highest	3.9953	3.7614

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	11.3564	0.2149	16.4349	0.0104		0.7679	0.7679		0.7679	0.7679	70.6640	47.8368	118.5009	0.1316	4.6300e-003	123.1728
Energy	0.0740	0.6333	0.2735	4.0400e-003		0.0512	0.0512		0.0512	0.0512	0.0000	3,066.0846	3,066.0846	0.1196	0.0353	3,079.5816
Mobile	2.3407	9.0818	25.9230	0.0982	9.1355	0.1040	9.2394	2.4602	0.0972	2.5574	0.0000	9,044.4321	9,044.4321	0.3740	0.0000	9,053.7809
Waste						0.0000	0.0000		0.0000	0.0000	149.0400	0.0000	149.0400	8.8080	0.0000	369.2404
Water						0.0000	0.0000		0.0000	0.0000	32.3514	231.6654	264.0168	3.3333	0.0806	371.3751
Total	**13.7711**	**9.9300**	**42.6314**	**0.1126**	**9.1355**	**0.9230**	**10.0584**	**2.4602**	**0.9162**	**3.3764**	**252.0555**	**12,390.0189**	**12,642.0744**	**12.7664**	**0.1205**	**12,997.1508**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	11.3564	0.2149	16.4349	0.0104		0.7679	0.7679		0.7679	0.7679	70.6640	47.8368	118.5009	0.1316	4.6300e-003	123.1728
Energy	0.0740	0.6333	0.2735	4.0400e-003		0.0512	0.0512		0.0512	0.0512	0.0000	3,066.0846	3,066.0846	0.1196	0.0353	3,079.5816
Mobile	2.3407	9.0818	25.9230	0.0982	9.1355	0.1040	9.2394	2.4602	0.0972	2.5574	0.0000	9,044.4321	9,044.4321	0.3740	0.0000	9,053.7809
Waste						0.0000	0.0000		0.0000	0.0000	149.0400	0.0000	149.0400	8.8080	0.0000	369.2404
Water						0.0000	0.0000		0.0000	0.0000	32.3514	231.6654	264.0168	3.3333	0.0806	371.3751
Total	**13.7711**	**9.9300**	**42.6314**	**0.1126**	**9.1355**	**0.9230**	**10.0584**	**2.4602**	**0.9162**	**3.3764**	**252.0555**	**12,390.0189**	**12,642.0744**	**12.7664**	**0.1205**	**12,997.1508**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Phase 0-Demolition/Excavation/Grading	Grading	3/1/2021	12/31/2021	5	220	11
2	Phase 0-Recycling Plant	Site Preparation	5/1/2021	7/31/2021	5	65	12
3	Phase 0-Utilities/Drainage/Subgrade	Site Preparation	7/1/2021	2/28/2022	5	173	13
4	Phase 0-Roadway Lift	Paving	2/1/2022	2/28/2022	5	20	14
5	Phase 1-C,D,I (HD Equipment Mix)	Building Construction	3/1/2022	9/30/2022	5	154	15
6	Phase 1-E (HD Equipment Mix)	Building Construction	3/1/2022	9/30/2022	5	154	18
7	Phase 1-F (HD Equipment Mix)	Building Construction	3/1/2022	8/31/2022	5	132	21
8	Phase 1-TH (HD Equipment Mix1)	Building Construction	3/1/2022	6/30/2022	5	88	24
9	Phase 1-TH (Compressors/Gradeall)	Building Construction	7/1/2022	1/31/2023	5	153	25

10	Phase 1-F (Electric Cranes Only)	Building Construction	9/1/2022	8/31/2024	5	522	22
11	Phase 1-C,D,I (Electric Cranes Only)	Building Construction	10/1/2022	8/31/2024	5	500	16
12	Phase 1-E (Electric Cranes Only)	Building Construction	10/1/2022	10/31/2023	5	282	19
13	Phase 1-TH Architectural Coatings1	Architectural Coating	10/1/2022	4/30/2023	5	150	31
14	Phase 1-TH (HD Equipment Mix2)	Building Construction	2/1/2023	6/30/2023	5	108	26
15	Phase 1-E Architectural Coatings	Architectural Coating	4/1/2023	10/31/2023	5	152	20
16	Phase 1-TH (No HD Equipment1)	Building Construction	7/1/2023	11/30/2023	5	109	27
17	Phase 1-TH (Gradealls Only)	Building Construction	12/1/2023	5/31/2024	5	131	28
18	Phase 1-F Architectural Coatings	Architectural Coating	1/1/2024	8/31/2024	5	175	23
19	Phase 1-C,D,I Architectural Coatings	Architectural Coating	2/1/2024	8/31/2024	5	152	17
20	Phase 1-TH Architectural Coatings2	Architectural Coating	2/1/2024	8/31/2024	5	152	32
21	Phase 1-TH (Excavator/BobCats Only)	Building Construction	6/1/2024	6/30/2024	5	20	29
22	Phase 1-TH (No HD Equipment2)	Building Construction	7/1/2024	8/31/2024	5	45	30
23	Phase 2-Material Off-Haul (No HD Equipment)	Building Construction	9/1/2024	10/25/2024	6	47	33
24	Phase 2-G,A,H (HD Equipment Mix)	Building Construction	9/1/2024	3/31/2025	5	151	34
25	Phase 2-B (HD Equipment Mix)	Building Construction	9/1/2024	3/31/2025	5	151	37
26	Phase 2-G,A,H (Electric Cranes Only)	Building Construction	4/1/2025	1/31/2027	5	479	35
27	Phase 2-B (Electric Cranes Only)	Building Construction	4/1/2025	4/30/2026	5	283	38
28	Phase 2-B Architectural Coatings	Architectural Coating	10/1/2025	4/30/2026	5	152	39
29	Phase 2-G,A,H Architectural Coatings	Architectural Coating	5/1/2026	1/31/2027	5	196	36

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 4

Residential Indoor: 866,700; Residential Outdoor: 288,900; Non-Residential Indoor: 11,250; Non-Residential Outdoor: 3,750; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Phase 0-Demolition/Excavation/Grading	Excavators	2	7.20	325	0.50
Phase 0-Demolition/Excavation/Grading	Other Construction Equipment	1	3.20	350	0.50

Phase 0-Demolition/Excavation/Grading	Graders	1	7.20	330	0.50
Phase 0-Demolition/Excavation/Grading	Plate Compactors	2	7.20	8	0.43
Phase 0-Demolition/Excavation/Grading	Crawler Tractors	1	7.20	400	1.00
Phase 0-Demolition/Excavation/Grading	Crawler Tractors	1	7.20	400	1.00
Phase 0-Recycling Plant	Crushing/Proc. Equipment	1	8.00	350	0.78
Phase 0-Utilities/Drainage/Subgrade	Crawler Tractors	2	6.00	400	1.00
Phase 0-Utilities/Drainage/Subgrade	Excavators	2	8.00	250	0.50
Phase 0-Utilities/Drainage/Subgrade	Plate Compactors	2	6.00	8	0.43
Phase 0-Roadway Lift	Paving Equipment	1	8.00	132	0.36
Phase 0-Roadway Lift	Pavers	1	8.00	130	0.42
Phase 0-Roadway Lift	Rollers	1	8.00	80	0.38
Phase 1-C,D,I (HD Equipment Mix)	Excavators	3	5.74	325	0.50
Phase 1-C,D,I (HD Equipment Mix)	Plate Compactors	3	2.87	8	0.43
Phase 1-C,D,I (HD Equipment Mix)	Skid Steer Loaders	3	7.18	65	0.37
Phase 1-C,D,I (HD Equipment Mix)	Tractors/Loaders/Backhoes	3	4.31	250	0.25
Phase 1-C,D,I (HD Equipment Mix)	Air Compressors	3	10.05	78	0.48
Phase 1-C,D,I (HD Equipment Mix)	Generator Sets	3	10.05	84	0.74
Phase 1-C,D,I (Electric Cranes Only)	Cranes	3	10.05	231	0.29
Phase 1-C,D,I Architectural Coatings	Air Compressors	3	10.05	78	0.48
Phase 1-E (HD Equipment Mix)	Excavators	1	7.26	325	0.50
Phase 1-E (HD Equipment Mix)	Plate Compactors	1	5.45	8	0.43
Phase 1-E (HD Equipment Mix)	Skid Steer Loaders	1	10.89	65	0.37
Phase 1-E (HD Equipment Mix)	Tractors/Loaders/Backhoes	1	3.63	250	0.25
Phase 1-E (HD Equipment Mix)	Air Compressors	1	12.71	78	0.48
Phase 1-E (HD Equipment Mix)	Generator Sets	1	12.71	84	0.74
Phase 1-E (Electric Cranes Only)	Cranes	1	12.71	231	0.29
Phase 1-E Architectural Coatings	Air Compressors	1	12.71	78	0.48
Phase 1-F (HD Equipment Mix)	Excavators	1	3.66	325	0.50
Phase 1-F (HD Equipment Mix)	Plate Compactors	1	2.44	8	0.43
Phase 1-F (HD Equipment Mix)	Skid Steer Loaders	1	6.10	65	0.37

Phase 1-F (HD Equipment Mix)	Tractors/Loaders/Backhoes	1	2.44	250	0.25
Phase 1-F (HD Equipment Mix)	Generator Sets	1	7.33	84	0.74
Phase 1-F (Electric Cranes Only)	Cranes	1	7.33	231	0.29
Phase 1-F Architectural Coatings	Air Compressors	1	7.33	78	0.48
Phase 1-TH (HD Equipment Mix1)	Excavators	1	4.97	325	0.50
Phase 1-TH (HD Equipment Mix1)	Plate Compactors	1	4.97	8	0.43
Phase 1-TH (HD Equipment Mix1)	Skid Steer Loaders	1	4.97	65	0.37
Phase 1-TH (HD Equipment Mix1)	Tractors/Loaders/Backhoes	1	4.97	250	0.25
Phase 1-TH (HD Equipment Mix1)	Air Compressors	1	4.97	78	0.48
Phase 1-TH (HD Equipment Mix1)	Generator Sets	1	4.97	84	0.74
Phase 1-TH (Compressors/Gradeall)	Air Compressors	1	4.26	78	0.48
Phase 1-TH (Compressors/Gradeall)	Rough Terrain Forklifts	4	4.97	100	0.40
Phase 1-TH (HD Equipment Mix2)	Excavators	1	4.97	325	0.50
Phase 1-TH (HD Equipment Mix2)	Plate Compactors	1	3.98	8	0.43
Phase 1-TH (HD Equipment Mix2)	Skid Steer Loaders	1	4.97	65	0.37
Phase 1-TH (HD Equipment Mix2)	Tractors/Loaders/Backhoes	1	3.98	250	0.25
Phase 1-TH (HD Equipment Mix2)	Generator Sets	1	4.97	84	0.74
Phase 1-TH (No HD Equipment1)	Aerial Lifts	1	4.97	63	0.31
Phase 1-TH (Gradealls Only)	Rough Terrain Forklifts	4	4.97	100	0.40
Phase 1-TH (Excavator/BobCats Only)	Excavators	1	4.97	325	0.50
Phase 1-TH (Excavator/BobCats Only)	Skid Steer Loaders	1	4.97	65	0.37
Phase 1-TH (No HD Equipment2)	Aerial Lifts	1	4.97	63	0.31
Phase 1-TH Architectural Coatings1	Air Compressors	1	4.97	78	0.48
Phase 1-TH Architectural Coatings2	Air Compressors	1	4.97	78	0.48
Phase 2-Material Off-Haul (No HD Equipment)	Aerial Lifts	1	8.00	63	0.31
Phase 2-G,A,H (HD Equipment Mix)	Excavators	3	4.25	325	0.50
Phase 2-G,A,H (HD Equipment Mix)	Plate Compactors	3	2.83	8	0.43
Phase 2-G,A,H (HD Equipment Mix)	Skid Steer Loaders	3	7.08	65	0.37
Phase 2-G,A,H (HD Equipment Mix)	Tractors/Loaders/Backhoes	3	2.83	250	0.25
Phase 2-G,A,H (HD Equipment Mix)	Air Compressors	3	8.49	78	0.48

Phase 2-G,A,H (HD Equipment Mix)	Generator Sets	3	9.91	84	0.74
Phase 2-G,A,H (Electric Cranes Only)	Cranes	3	9.91	231	0.29
Phase 2-G,A,H Architectural Coatings	Air Compressors	3	9.91	78	0.48
Phase 2-B (HD Equipment Mix)	Excavators	1	8.84	325	0.50
Phase 2-B (HD Equipment Mix)	Plate Compactors	1	6.63	8	0.43
Phase 2-B (HD Equipment Mix)	Skid Steer Loaders	1	13.26	65	0.37
Phase 2-B (HD Equipment Mix)	Tractors/Loaders/Backhoes	1	4.42	250	0.25
Phase 2-B (HD Equipment Mix)	Air Compressors	1	13.26	78	0.48
Phase 2-B (HD Equipment Mix)	Generator Sets	1	15.47	84	0.74
Phase 2-B (Electric Cranes Only)	Cranes	1	15.47	231	0.29
Phase 2-B Architectural Coatings	Air Compressors	1	15.47	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Phase 0-Demolition/Excavation	8	60.00	0.00	34.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 0-Recycling Plant	1	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 0-Utilities/Drainage/Sub	6	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 0-Roadway Lift	3	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-C,D,I (HD Equipment Mix)	18	442.00	226.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-C,D,I (Electric Cranes Only)	3	442.00	226.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-C,D,I Architectural Coatings	3	442.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-E (HD Equipment Mix)	6	282.00	144.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-E (Electric Cranes Only)	1	282.00	144.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-E Architectural Coatings	1	282.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-F (HD Equipment Mix)	5	136.00	76.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-F (Electric Cranes Only)	1	136.00	76.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-F Architectural Coatings	1	136.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-TH (HD Equipment Mix1)	6	108.00	52.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-TH (Compressors/Gradeal	5	108.00	52.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Phase 1-TH (HD Equipment Mix2)	5	108.00	52.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-TH (No HD Equipment1)	1	108.00	52.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-TH (Gradealls Only)	4	108.00	52.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-TH (Excavator/BobCats	2	108.00	52.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-TH (No HD Equipment2)	1	108.00	52.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-TH Architectural	1	108.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 1-TH Architectural	1	108.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2-Material Off-Haul (No HD	1	0.00	0.00	9,500.00	10.80	7.30	22.00	LD_Mix	HDT_Mix	HHDT
Phase 2-G,A,H (HD Equipment Mix)	18	598.00	306.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2-G,A,H (Electric Cranes Only)	3	598.00	306.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2-G,A,H Architectural Coatings	3	598.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2-B (HD Equipment Mix)	6	254.00	130.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2-B (Electric Cranes Only)	1	254.00	130.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Phase 2-B Architectural Coatings	1	254.00	0.00	34.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

3.2 Phase 0-Demolition/Excavation/Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1050	0.0000	0.1050	0.0113	0.0000	0.0113	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.6067	6.5797	4.1245	0.0118		0.2533	0.2533		0.2332	0.2332	0.0000	1,031.0993	1,031.0993	0.3321	0.0000	1,039.4023
Total	**0.6067**	**6.5797**	**4.1245**	**0.0118**	**0.1050**	**0.2533**	**0.3583**	**0.0113**	**0.2332**	**0.2445**	**0.0000**	**1,031.0993**	**1,031.0993**	**0.3321**	**0.0000**	**1,039.4023**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-004	5.4900e-003	1.8000e-003	1.0000e-005	2.9000e-004	2.0000e-005	3.0000e-004	8.0000e-005	2.0000e-005	9.0000e-005	0.0000	1.4917	1.4917	2.7000e-004	0.0000	1.4986
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0188	0.0120	0.1372	5.3000e-004	0.0522	3.9000e-004	0.0526	0.0139	3.6000e-004	0.0142	0.0000	47.7955	47.7955	9.8000e-004	0.0000	47.8199
Total	**0.0189**	**0.0175**	**0.1390**	**5.4000e-004**	**0.0524**	**4.1000e-004**	**0.0529**	**0.0140**	**3.8000e-004**	**0.0143**	**0.0000**	**49.2872**	**49.2872**	**1.2500e-003**	**0.0000**	**49.3185**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1050	0.0000	0.1050	0.0113	0.0000	0.0113	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1604	1.5022	5.5963	0.0118		0.0191	0.0191		0.0191	0.0191	0.0000	1,031.0981	1,031.0981	0.3321	0.0000	1,039.4011
Total	**0.1604**	**1.5022**	**5.5963**	**0.0118**	**0.1050**	**0.0191**	**0.1241**	**0.0113**	**0.0191**	**0.0305**	**0.0000**	**1,031.0981**	**1,031.0981**	**0.3321**	**0.0000**	**1,039.4011**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-004	5.4900e-003	1.8000e-003	1.0000e-005	2.9000e-004	2.0000e-005	3.0000e-004	8.0000e-005	2.0000e-005	9.0000e-005	0.0000	1.4917	1.4917	2.7000e-004	0.0000	1.4986
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0188	0.0120	0.1372	5.3000e-004	0.0522	3.9000e-004	0.0526	0.0139	3.6000e-004	0.0142	0.0000	47.7955	47.7955	9.8000e-004	0.0000	47.8199
Total	**0.0189**	**0.0175**	**0.1390**	**5.4000e-004**	**0.0524**	**4.1000e-004**	**0.0529**	**0.0140**	**3.8000e-004**	**0.0143**	**0.0000**	**49.2872**	**49.2872**	**1.2500e-003**	**0.0000**	**49.3185**

3.3 Phase 0-Recycling Plant - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0419	0.2463	0.1678	7.8000e-004		8.6100e-003	8.6100e-003		8.6100e-003	8.6100e-003	0.0000	80.6759	80.6759	3.4100e-003	0.0000	80.7610
Total	**0.0419**	**0.2463**	**0.1678**	**7.8000e-004**	**0.0000**	**8.6100e-003**	**8.6100e-003**	**0.0000**	**8.6100e-003**	**8.6100e-003**	**0.0000**	**80.6759**	**80.6759**	**3.4100e-003**	**0.0000**	**80.7610**

Unmitigated Construction Off-Site

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

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3900e-003	0.0407	0.3443	7.8000e-004		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003	0.0000	80.6758	80.6758	3.4100e-003	0.0000	80.7610
Total	**9.3900e-003**	**0.0407**	**0.3443**	**7.8000e-004**	**0.0000**	**1.2500e-003**	**1.2500e-003**	**0.0000**	**1.2500e-003**	**1.2500e-003**	**0.0000**	**80.6758**	**80.6758**	**3.4100e-003**	**0.0000**	**80.7610**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Phase 0-Utilities/Drainage/Subgrade - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0688	0.0000	0.0688	7.4300e-003	0.0000	7.4300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2492	2.8095	1.7557	4.8900e-003		0.1063	0.1063		0.0978	0.0978	0.0000	428.2833	428.2833	0.1378	0.0000	431.7292
Total	**0.2492**	**2.8095**	**1.7557**	**4.8900e-003**	**0.0688**	**0.1063**	**0.1751**	**7.4300e-003**	**0.0978**	**0.1053**	**0.0000**	**428.2833**	**428.2833**	**0.1378**	**0.0000**	**431.7292**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7600e-003	2.4000e-003	0.0274	1.1000e-004	0.0104	8.0000e-005	0.0105	2.7700e-003	7.0000e-005	2.8500e-003	0.0000	9.5591	9.5591	2.0000e-004	0.0000	9.5640
Total	**3.7600e-003**	**2.4000e-003**	**0.0274**	**1.1000e-004**	**0.0104**	**8.0000e-005**	**0.0105**	**2.7700e-003**	**7.0000e-005**	**2.8500e-003**	**0.0000**	**9.5591**	**9.5591**	**2.0000e-004**	**0.0000**	**9.5640**

Mitigated Construction On-Site

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

Category	tons/yr										MT/yr					
Fugitive Dust					0.0688	0.0000	0.0688	7.4300e-003	0.0000	7.4300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0652	0.5570	2.2932	4.8900e-003		7.9200e-003	7.9200e-003		7.9200e-003	7.9200e-003	0.0000	428.2828	428.2828	0.1378	0.0000	431.7286
Total	**0.0652**	**0.5570**	**2.2932**	**4.8900e-003**	**0.0688**	**7.9200e-003**	**0.0767**	**7.4300e-003**	**7.9200e-003**	**0.0154**	**0.0000**	**428.2828**	**428.2828**	**0.1378**	**0.0000**	**431.7286**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7600e-003	2.4000e-003	0.0274	1.1000e-004	0.0104	8.0000e-005	0.0105	2.7700e-003	7.0000e-005	2.8500e-003	0.0000	9.5591	9.5591	2.0000e-004	0.0000	9.5640
Total	**3.7600e-003**	**2.4000e-003**	**0.0274**	**1.1000e-004**	**0.0104**	**8.0000e-005**	**0.0105**	**2.7700e-003**	**7.0000e-005**	**2.8500e-003**	**0.0000**	**9.5591**	**9.5591**	**2.0000e-004**	**0.0000**	**9.5640**

3.4 Phase 0-Utilities/Drainage/Subgrade - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0688	0.0000	0.0688	7.4300e-003	0.0000	7.4300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0698	0.7284	0.5209	1.5200e-003		0.0283	0.0283		0.0261	0.0261	0.0000	133.0334	133.0334	0.0428	0.0000	134.1038

Total	**0.0698**	**0.7284**	**0.5209**	**1.5200e-003**	**0.0688**	**0.0283**	**0.0971**	**7.4300e-003**	**0.0261**	**0.0335**	**0.0000**	**133.0334**	**133.0334**	**0.0428**	**0.0000**	**134.1038**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-003	6.7000e-004	7.9400e-003	3.0000e-005	3.2400e-003	2.0000e-005	3.2600e-003	8.6000e-004	2.0000e-005	8.8000e-004	0.0000	2.8589	2.8589	6.0000e-005	0.0000	2.8603
Total	**1.1000e-003**	**6.7000e-004**	**7.9400e-003**	**3.0000e-005**	**3.2400e-003**	**2.0000e-005**	**3.2600e-003**	**8.6000e-004**	**2.0000e-005**	**8.8000e-004**	**0.0000**	**2.8589**	**2.8589**	**6.0000e-005**	**0.0000**	**2.8603**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0688	0.0000	0.0688	7.4300e-003	0.0000	7.4300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0203	0.1730	0.7123	1.5200e-003		2.4600e-003	2.4600e-003		2.4600e-003	2.4600e-003	0.0000	133.0332	133.0332	0.0428	0.0000	134.1036
Total	**0.0203**	**0.1730**	**0.7123**	**1.5200e-003**	**0.0688**	**2.4600e-003**	**0.0713**	**7.4300e-003**	**2.4600e-003**	**9.8900e-003**	**0.0000**	**133.0332**	**133.0332**	**0.0428**	**0.0000**	**134.1036**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-003	6.7000e-004	7.9400e-003	3.0000e-005	3.2400e-003	2.0000e-005	3.2600e-003	8.6000e-004	2.0000e-005	8.8000e-004	0.0000	2.8589	2.8589	6.0000e-005	0.0000	2.8603
Total	**1.1000e-003**	**6.7000e-004**	**7.9400e-003**	**3.0000e-005**	**3.2400e-003**	**2.0000e-005**	**3.2600e-003**	**8.6000e-004**	**2.0000e-005**	**8.8000e-004**	**0.0000**	**2.8589**	**2.8589**	**6.0000e-005**	**0.0000**	**2.8603**

3.5 Phase 0-Roadway Lift - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.5100e-003	0.0556	0.0729	1.1000e-004		2.8400e-003	2.8400e-003		2.6100e-003	2.6100e-003	0.0000	10.0138	10.0138	3.2400e-003	0.0000	10.0948
Paving	5.2400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0108**	**0.0556**	**0.0729**	**1.1000e-004**		**2.8400e-003**	**2.8400e-003**		**2.6100e-003**	**2.6100e-003**	**0.0000**	**10.0138**	**10.0138**	**3.2400e-003**	**0.0000**	**10.0948**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	3.3000e-004	3.8800e-003	2.0000e-005	1.5800e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.3946	1.3946	3.0000e-005	0.0000	1.3952
Total	**5.4000e-004**	**3.3000e-004**	**3.8800e-003**	**2.0000e-005**	**1.5800e-003**	**1.0000e-005**	**1.5900e-003**	**4.2000e-004**	**1.0000e-005**	**4.3000e-004**	**0.0000**	**1.3946**	**1.3946**	**3.0000e-005**	**0.0000**	**1.3952**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.6700e-003	0.0502	0.0865	1.1000e-004		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	10.0138	10.0138	3.2400e-003	0.0000	10.0947
Paving	5.2400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**6.9100e-003**	**0.0502**	**0.0865**	**1.1000e-004**		**1.9000e-004**	**1.9000e-004**		**1.9000e-004**	**1.9000e-004**	**0.0000**	**10.0138**	**10.0138**	**3.2400e-003**	**0.0000**	**10.0947**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	3.3000e-004	3.8800e-003	2.0000e-005	1.5800e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.3946	1.3946	3.0000e-005	0.0000	1.3952
Total	**5.4000e-004**	**3.3000e-004**	**3.8800e-003**	**2.0000e-005**	**1.5800e-003**	**1.0000e-005**	**1.5900e-003**	**4.2000e-004**	**1.0000e-005**	**4.3000e-004**	**0.0000**	**1.3946**	**1.3946**	**3.0000e-005**	**0.0000**	**1.3952**

3.6 Phase 1-C,D,I (HD Equipment Mix) - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2791	2.3685	2.7371	6.5000e-003		0.1080	0.1080		0.1054	0.1054	0.0000	564.0590	564.0590	0.1111	0.0000	566.8361
Total	**0.2791**	**2.3685**	**2.7371**	**6.5000e-003**		**0.1080**	**0.1080**		**0.1054**	**0.1054**	**0.0000**	**564.0590**	**564.0590**	**0.1111**	**0.0000**	**566.8361**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0497	1.8888	0.5976	4.5600e-003	0.1137	3.9600e-003	0.1177	0.0329	3.7800e-003	0.0367	0.0000	469.2981	469.2981	0.0622	0.0000	470.8542
Worker	0.0914	0.0559	0.6594	2.6200e-003	0.2689	2.0000e-003	0.2709	0.0715	1.8400e-003	0.0734	0.0000	237.3141	237.3141	4.5700e-003	0.0000	237.4284
Total	**0.1411**	**1.9447**	**1.2570**	**7.1800e-003**	**0.3827**	**5.9600e-003**	**0.3886**	**0.1044**	**5.6200e-003**	**0.1101**	**0.0000**	**706.6122**	**706.6122**	**0.0668**	**0.0000**	**708.2826**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1156	2.1217	3.8035	6.5000e-003		0.0188	0.0188		0.0188	0.0188	0.0000	564.0583	564.0583	0.1111	0.0000	566.8354
Total	**0.1156**	**2.1217**	**3.8035**	**6.5000e-003**		**0.0188**	**0.0188**		**0.0188**	**0.0188**	**0.0000**	**564.0583**	**564.0583**	**0.1111**	**0.0000**	**566.8354**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0497	1.8888	0.5976	4.5600e-003	0.1137	3.9600e-003	0.1177	0.0329	3.7800e-003	0.0367	0.0000	469.2981	469.2981	0.0622	0.0000	470.8542
Worker	0.0914	0.0559	0.6594	2.6200e-003	0.2689	2.0000e-003	0.2709	0.0715	1.8400e-003	0.0734	0.0000	237.3141	237.3141	4.5700e-003	0.0000	237.4284
Total	**0.1411**	**1.9447**	**1.2570**	**7.1800e-003**	**0.3827**	**5.9600e-003**	**0.3886**	**0.1044**	**5.6200e-003**	**0.1101**	**0.0000**	**706.6122**	**706.6122**	**0.0668**	**0.0000**	**708.2826**

3.7 Phase 1-E (HD Equipment Mix) - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1160	0.9817	1.1594	2.6900e-003		0.0450	0.0450		0.0440	0.0440	0.0000	233.2900	233.2900	0.0453	0.0000	234.4214

Total	**0.1160**	**0.9817**	**1.1594**	**2.6900e-003**		**0.0450**	**0.0450**		**0.0440**	**0.0440**	**0.0000**	**233.2900**	**233.2900**	**0.0453**	**0.0000**	**234.4214**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0317	1.2035	0.3808	2.9000e-003	0.0725	2.5200e-003	0.0750	0.0210	2.4100e-003	0.0234	0.0000	299.0218	299.0218	0.0397	0.0000	300.0133
Worker	0.0583	0.0357	0.4207	1.6700e-003	0.1716	1.2800e-003	0.1729	0.0457	1.1800e-003	0.0468	0.0000	151.4085	151.4085	2.9200e-003	0.0000	151.4815
Total	**0.0900**	**1.2391**	**0.8015**	**4.5700e-003**	**0.2441**	**3.8000e-003**	**0.2479**	**0.0666**	**3.5900e-003**	**0.0702**	**0.0000**	**450.4303**	**450.4303**	**0.0426**	**0.0000**	**451.4947**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0481	0.8899	1.5807	2.6900e-003		8.6100e-003	8.6100e-003		8.6100e-003	8.6100e-003	0.0000	233.2898	233.2898	0.0453	0.0000	234.4212
Total	**0.0481**	**0.8899**	**1.5807**	**2.6900e-003**		**8.6100e-003**	**8.6100e-003**		**8.6100e-003**	**8.6100e-003**	**0.0000**	**233.2898**	**233.2898**	**0.0453**	**0.0000**	**234.4212**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0317	1.2035	0.3808	2.9000e-003	0.0725	2.5200e-003	0.0750	0.0210	2.4100e-003	0.0234	0.0000	299.0218	299.0218	0.0397	0.0000	300.0133
Worker	0.0583	0.0357	0.4207	1.6700e-003	0.1716	1.2800e-003	0.1729	0.0457	1.1800e-003	0.0468	0.0000	151.4085	151.4085	2.9200e-003	0.0000	151.4815
Total	**0.0900**	**1.2391**	**0.8015**	**4.5700e-003**	**0.2441**	**3.8000e-003**	**0.2479**	**0.0666**	**3.5900e-003**	**0.0702**	**0.0000**	**450.4303**	**450.4303**	**0.0426**	**0.0000**	**451.4947**

3.8 Phase 1-F (HD Equipment Mix) - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0395	0.3620	0.4140	1.0400e-003		0.0153	0.0153		0.0148	0.0148	0.0000	90.3224	90.3224	0.0197	0.0000	90.8136
Total	**0.0395**	**0.3620**	**0.4140**	**1.0400e-003**		**0.0153**	**0.0153**		**0.0148**	**0.0148**	**0.0000**	**90.3224**	**90.3224**	**0.0197**	**0.0000**	**90.8136**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0143	0.5444	0.1723	1.3100e-003	0.0328	1.1400e-003	0.0339	9.4800e-003	1.0900e-003	0.0106	0.0000	135.2718	135.2718	0.0179	0.0000	135.7203
Worker	0.0241	0.0147	0.1739	6.9000e-004	0.0709	5.3000e-004	0.0715	0.0189	4.9000e-004	0.0194	0.0000	62.5883	62.5883	1.2100e-003	0.0000	62.6185
Total	**0.0384**	**0.5592**	**0.3462**	**2.0000e-003**	**0.1037**	**1.6700e-003**	**0.1054**	**0.0284**	**1.5800e-003**	**0.0299**	**0.0000**	**197.8601**	**197.8601**	**0.0192**	**0.0000**	**198.3388**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0186	0.3407	0.6071	1.0400e-003		3.7900e-003	3.7900e-003		3.7900e-003	3.7900e-003	0.0000	90.3223	90.3223	0.0197	0.0000	90.8135
Total	**0.0186**	**0.3407**	**0.6071**	**1.0400e-003**		**3.7900e-003**	**3.7900e-003**		**3.7900e-003**	**3.7900e-003**	**0.0000**	**90.3223**	**90.3223**	**0.0197**	**0.0000**	**90.8135**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0143	0.5444	0.1723	1.3100e-003	0.0328	1.1400e-003	0.0339	9.4800e-003	1.0900e-003	0.0106	0.0000	135.2718	135.2718	0.0179	0.0000	135.7203
Worker	0.0241	0.0147	0.1739	6.9000e-004	0.0709	5.3000e-004	0.0715	0.0189	4.9000e-004	0.0194	0.0000	62.5883	62.5883	1.2100e-003	0.0000	62.6185
Total	**0.0384**	**0.5592**	**0.3462**	**2.0000e-003**	**0.1037**	**1.6700e-003**	**0.1054**	**0.0284**	**1.5800e-003**	**0.0299**	**0.0000**	**197.8601**	**197.8601**	**0.0192**	**0.0000**	**198.3388**

3.9 Phase 1-TH (HD Equipment Mix1) - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0352	0.3039	0.3287	8.9000e-004		0.0130	0.0130		0.0125	0.0125	0.0000	76.8769	76.8769	0.0180	0.0000	77.3270
Total	**0.0352**	**0.3039**	**0.3287**	**8.9000e-004**		**0.0130**	**0.0130**		**0.0125**	**0.0125**	**0.0000**	**76.8769**	**76.8769**	**0.0180**	**0.0000**	**77.3270**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.5400e-003	0.2483	0.0786	6.0000e-004	0.0150	5.2000e-004	0.0155	4.3200e-003	5.0000e-004	4.8200e-003	0.0000	61.7029	61.7029	8.1800e-003	0.0000	61.9075
Worker	0.0128	7.8000e-003	0.0921	3.7000e-004	0.0376	2.8000e-004	0.0378	9.9900e-003	2.6000e-004	0.0103	0.0000	33.1350	33.1350	6.4000e-004	0.0000	33.1510
Total	**0.0193**	**0.2561**	**0.1706**	**9.7000e-004**	**0.0525**	**8.0000e-004**	**0.0533**	**0.0143**	**7.6000e-004**	**0.0151**	**0.0000**	**94.8379**	**94.8379**	**8.8200e-003**	**0.0000**	**95.0585**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0154	0.2747	0.5030	8.9000e-004		2.5500e-003	2.5500e-003		2.5500e-003	2.5500e-003	0.0000	76.8768	76.8768	0.0180	0.0000	77.3269
Total	**0.0154**	**0.2747**	**0.5030**	**8.9000e-004**		**2.5500e-003**	**2.5500e-003**		**2.5500e-003**	**2.5500e-003**	**0.0000**	**76.8768**	**76.8768**	**0.0180**	**0.0000**	**77.3269**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.5400e-003	0.2483	0.0786	6.0000e-004	0.0150	5.2000e-004	0.0155	4.3200e-003	5.0000e-004	4.8200e-003	0.0000	61.7029	61.7029	8.1800e-003	0.0000	61.9075
Worker	0.0128	7.8000e-003	0.0921	3.7000e-004	0.0376	2.8000e-004	0.0378	9.9900e-003	2.6000e-004	0.0103	0.0000	33.1350	33.1350	6.4000e-004	0.0000	33.1510
Total	**0.0193**	**0.2561**	**0.1706**	**9.7000e-004**	**0.0525**	**8.0000e-004**	**0.0533**	**0.0143**	**7.6000e-004**	**0.0151**	**0.0000**	**94.8379**	**94.8379**	**8.8200e-003**	**0.0000**	**95.0585**

3.10 Phase 1-TH (Compressors/Gradeall) - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0277	0.3067	0.4572	7.0000e-004		0.0122	0.0122		0.0115	0.0115	0.0000	61.2065	61.2065	0.0167	0.0000	61.6247

Total	**0.0277**	**0.3067**	**0.4572**	**7.0000e-004**		**0.0122**	**0.0122**		**0.0115**	**0.0115**	**0.0000**	**61.2065**	**61.2065**	**0.0167**	**0.0000**	**61.6247**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.7400e-003	0.3697	0.1170	8.9000e-004	0.0223	7.7000e-004	0.0230	6.4300e-003	7.4000e-004	7.1700e-003	0.0000	91.8532	91.8532	0.0122	0.0000	92.1578
Worker	0.0190	0.0116	0.1371	5.4000e-004	0.0559	4.2000e-004	0.0563	0.0149	3.8000e-004	0.0153	0.0000	49.3260	49.3260	9.5000e-004	0.0000	49.3497
Total	**0.0287**	**0.3813**	**0.2540**	**1.4300e-003**	**0.0782**	**1.1900e-003**	**0.0794**	**0.0213**	**1.1200e-003**	**0.0224**	**0.0000**	**141.1792**	**141.1792**	**0.0131**	**0.0000**	**141.5075**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0152	0.2953	0.5105	7.0000e-004		1.1000e-003	1.1000e-003		1.1000e-003	1.1000e-003	0.0000	61.2065	61.2065	0.0167	0.0000	61.6246
Total	**0.0152**	**0.2953**	**0.5105**	**7.0000e-004**		**1.1000e-003**	**1.1000e-003**		**1.1000e-003**	**1.1000e-003**	**0.0000**	**61.2065**	**61.2065**	**0.0167**	**0.0000**	**61.6246**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.7400e-003	0.3697	0.1170	8.9000e-004	0.0223	7.7000e-004	0.0230	6.4300e-003	7.4000e-004	7.1700e-003	0.0000	91.8532	91.8532	0.0122	0.0000	92.1578
Worker	0.0190	0.0116	0.1371	5.4000e-004	0.0559	4.2000e-004	0.0563	0.0149	3.8000e-004	0.0153	0.0000	49.3260	49.3260	9.5000e-004	0.0000	49.3497
Total	**0.0287**	**0.3813**	**0.2540**	**1.4300e-003**	**0.0782**	**1.1900e-003**	**0.0794**	**0.0213**	**1.1200e-003**	**0.0224**	**0.0000**	**141.1792**	**141.1792**	**0.0131**	**0.0000**	**141.5075**

3.10 Phase 1-TH (Compressors/Gradeall) - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.3900e-003	0.0485	0.0767	1.2000e-004		1.7800e-003	1.7800e-003		1.6800e-003	1.6800e-003	0.0000	10.2802	10.2802	2.8000e-003	0.0000	10.3501
Total	**4.3900e-003**	**0.0485**	**0.0767**	**1.2000e-004**		**1.7800e-003**	**1.7800e-003**		**1.6800e-003**	**1.6800e-003**	**0.0000**	**10.2802**	**10.2802**	**2.8000e-003**	**0.0000**	**10.3501**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3200e-003	0.0515	0.0190	1.5000e-004	3.7400e-003	7.0000e-005	3.8100e-003	1.0800e-003	7.0000e-005	1.1500e-003	0.0000	15.0424	15.0424	2.0000e-003	0.0000	15.0924
Worker	3.0200e-003	1.7700e-003	0.0215	9.0000e-005	9.3900e-003	7.0000e-005	9.4600e-003	2.5000e-003	6.0000e-005	2.5600e-003	0.0000	7.9638	7.9638	1.4000e-004	0.0000	7.9674
Total	**4.3400e-003**	**0.0532**	**0.0405**	**2.4000e-004**	**0.0131**	**1.4000e-004**	**0.0133**	**3.5800e-003**	**1.3000e-004**	**3.7100e-003**	**0.0000**	**23.0062**	**23.0062**	**2.1400e-003**	**0.0000**	**23.0598**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.5500e-003	0.0496	0.0857	1.2000e-004		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004	0.0000	10.2802	10.2802	2.8000e-003	0.0000	10.3501
Total	**2.5500e-003**	**0.0496**	**0.0857**	**1.2000e-004**		**1.9000e-004**	**1.9000e-004**		**1.9000e-004**	**1.9000e-004**	**0.0000**	**10.2802**	**10.2802**	**2.8000e-003**	**0.0000**	**10.3501**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3200e-003	0.0515	0.0190	1.5000e-004	3.7400e-003	7.0000e-005	3.8100e-003	1.0800e-003	7.0000e-005	1.1500e-003	0.0000	15.0424	15.0424	2.0000e-003	0.0000	15.0924
Worker	3.0200e-003	1.7700e-003	0.0215	9.0000e-005	9.3900e-003	7.0000e-005	9.4600e-003	2.5000e-003	6.0000e-005	2.5600e-003	0.0000	7.9638	7.9638	1.4000e-004	0.0000	7.9674
Total	**4.3400e-003**	**0.0532**	**0.0405**	**2.4000e-004**	**0.0131**	**1.4000e-004**	**0.0133**	**3.5800e-003**	**1.3000e-004**	**3.7100e-003**	**0.0000**	**23.0062**	**23.0062**	**2.1400e-003**	**0.0000**	**23.0598**

3.11 Phase 1-F (Electric Cranes Only) - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0149	0.1667	0.0754	2.3000e-004		6.9200e-003	6.9200e-003		6.3700e-003	6.3700e-003	0.0000	20.1945	20.1945	6.5300e-003	0.0000	20.3578
Total	**0.0149**	**0.1667**	**0.0754**	**2.3000e-004**		**6.9200e-003**	**6.9200e-003**		**6.3700e-003**	**6.3700e-003**	**0.0000**	**20.1945**	**20.1945**	**6.5300e-003**	**0.0000**	**20.3578**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.4500e-003	0.3588	0.1135	8.7000e-004	0.0216	7.5000e-004	0.0224	6.2500e-003	7.2000e-004	6.9600e-003	0.0000	89.1564	89.1564	0.0118	0.0000	89.4520
Worker	0.0159	9.7200e-003	0.1146	4.6000e-004	0.0468	3.5000e-004	0.0471	0.0124	3.2000e-004	0.0128	0.0000	41.2514	41.2514	7.9000e-004	0.0000	41.2713
Total	**0.0253**	**0.3686**	**0.2282**	**1.3300e-003**	**0.0684**	**1.1000e-003**	**0.0695**	**0.0187**	**1.0400e-003**	**0.0197**	**0.0000**	**130.4078**	**130.4078**	**0.0126**	**0.0000**	**130.7233**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	2.3000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**2.3000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.4500e-003	0.3588	0.1135	8.7000e-004	0.0216	7.5000e-004	0.0224	6.2500e-003	7.2000e-004	6.9600e-003	0.0000	89.1564	89.1564	0.0118	0.0000	89.4520
Worker	0.0159	9.7200e-003	0.1146	4.6000e-004	0.0468	3.5000e-004	0.0471	0.0124	3.2000e-004	0.0128	0.0000	41.2514	41.2514	7.9000e-004	0.0000	41.2713
Total	**0.0253**	**0.3686**	**0.2282**	**1.3300e-003**	**0.0684**	**1.1000e-003**	**0.0695**	**0.0187**	**1.0400e-003**	**0.0197**	**0.0000**	**130.4078**	**130.4078**	**0.0126**	**0.0000**	**130.7233**

3.11 Phase 1-F (Electric Cranes Only) - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0418	0.4542	0.2184	6.9000e-004		0.0190	0.0190		0.0175	0.0175	0.0000	60.3501	60.3501	0.0195	0.0000	60.8381

Total	**0.0418**	**0.4542**	**0.2184**	**6.9000e-004**		**0.0190**	**0.0190**		**0.0175**	**0.0175**	**0.0000**	**60.3501**	**60.3501**	**0.0195**	**0.0000**	**60.8381**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0228	0.8890	0.3275	2.5100e-003	0.0646	1.2800e-003	0.0659	0.0187	1.2200e-003	0.0199	0.0000	259.8239	259.8239	0.0345	0.0000	260.6873
Worker	0.0449	0.0263	0.3199	1.3100e-003	0.1397	1.0300e-003	0.1407	0.0372	9.5000e-004	0.0381	0.0000	118.5185	118.5185	2.1500e-003	0.0000	118.5723
Total	**0.0677**	**0.9153**	**0.6474**	**3.8200e-003**	**0.2043**	**2.3100e-003**	**0.2066**	**0.0558**	**2.1700e-003**	**0.0580**	**0.0000**	**378.3424**	**378.3424**	**0.0367**	**0.0000**	**379.2596**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	6.9000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**6.9000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0228	0.8890	0.3275	2.5100e-003	0.0646	1.2800e-003	0.0659	0.0187	1.2200e-003	0.0199	0.0000	259.8239	259.8239	0.0345	0.0000	260.6873
Worker	0.0449	0.0263	0.3199	1.3100e-003	0.1397	1.0300e-003	0.1407	0.0372	9.5000e-004	0.0381	0.0000	118.5185	118.5185	2.1500e-003	0.0000	118.5723
Total	**0.0677**	**0.9153**	**0.6474**	**3.8200e-003**	**0.2043**	**2.3100e-003**	**0.2066**	**0.0558**	**2.1700e-003**	**0.0580**	**0.0000**	**378.3424**	**378.3424**	**0.0367**	**0.0000**	**379.2596**

3.11 Phase 1-F (Electric Cranes Only) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0266	0.2808	0.1422	4.6000e-004		0.0117	0.0117		0.0108	0.0108	0.0000	40.6194	40.6194	0.0131	0.0000	40.9478
Total	**0.0266**	**0.2808**	**0.1422**	**4.6000e-004**		**0.0117**	**0.0117**		**0.0108**	**0.0108**	**0.0000**	**40.6194**	**40.6194**	**0.0131**	**0.0000**	**40.9478**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0147	0.5837	0.2182	1.6700e-003	0.0435	8.2000e-004	0.0443	0.0126	7.9000e-004	0.0134	0.0000	173.2591	173.2591	0.0232	0.0000	173.8394
Worker	0.0288	0.0161	0.2017	8.5000e-004	0.0940	6.8000e-004	0.0947	0.0250	6.3000e-004	0.0257	0.0000	76.5962	76.5962	1.3200e-003	0.0000	76.6291
Total	**0.0434**	**0.5998**	**0.4200**	**2.5200e-003**	**0.1375**	**1.5000e-003**	**0.1390**	**0.0376**	**1.4200e-003**	**0.0390**	**0.0000**	**249.8553**	**249.8553**	**0.0245**	**0.0000**	**250.4685**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	4.6000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**4.6000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0147	0.5837	0.2182	1.6700e-003	0.0435	8.2000e-004	0.0443	0.0126	7.9000e-004	0.0134	0.0000	173.2591	173.2591	0.0232	0.0000	173.8394
Worker	0.0288	0.0161	0.2017	8.5000e-004	0.0940	6.8000e-004	0.0947	0.0250	6.3000e-004	0.0257	0.0000	76.5962	76.5962	1.3200e-003	0.0000	76.6291
Total	**0.0434**	**0.5998**	**0.4200**	**2.5200e-003**	**0.1375**	**1.5000e-003**	**0.1390**	**0.0376**	**1.4200e-003**	**0.0390**	**0.0000**	**249.8553**	**249.8553**	**0.0245**	**0.0000**	**250.4685**

3.12 Phase 1-C,D,I (Electric Cranes Only) - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0457	0.5125	0.2318	7.1000e-004		0.0213	0.0213		0.0196	0.0196	0.0000	62.0939	62.0939	0.0201	0.0000	62.5959
Total	**0.0457**	**0.5125**	**0.2318**	**7.1000e-004**		**0.0213**	**0.0213**		**0.0196**	**0.0196**	**0.0000**	**62.0939**	**62.0939**	**0.0201**	**0.0000**	**62.5959**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0210	0.7972	0.2522	1.9200e-003	0.0480	1.6700e-003	0.0497	0.0139	1.6000e-003	0.0155	0.0000	198.0804	198.0804	0.0263	0.0000	198.7372
Worker	0.0386	0.0236	0.2783	1.1100e-003	0.1135	8.5000e-004	0.1144	0.0302	7.8000e-004	0.0310	0.0000	100.1650	100.1650	1.9300e-003	0.0000	100.2133
Total	**0.0596**	**0.8208**	**0.5306**	**3.0300e-003**	**0.1615**	**2.5200e-003**	**0.1640**	**0.0441**	**2.3800e-003**	**0.0465**	**0.0000**	**298.2454**	**298.2454**	**0.0282**	**0.0000**	**298.9504**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	7.1000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**7.1000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0210	0.7972	0.2522	1.9200e-003	0.0480	1.6700e-003	0.0497	0.0139	1.6000e-003	0.0155	0.0000	198.0804	198.0804	0.0263	0.0000	198.7372
Worker	0.0386	0.0236	0.2783	1.1100e-003	0.1135	8.5000e-004	0.1144	0.0302	7.8000e-004	0.0310	0.0000	100.1650	100.1650	1.9300e-003	0.0000	100.2133
Total	**0.0596**	**0.8208**	**0.5306**	**3.0300e-003**	**0.1615**	**2.5200e-003**	**0.1640**	**0.0441**	**2.3800e-003**	**0.0465**	**0.0000**	**298.2454**	**298.2454**	**0.0282**	**0.0000**	**298.9504**

3.12 Phase 1-C,D,I (Electric Cranes Only) - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1722	1.8693	0.8987	2.8300e-003		0.0781	0.0781		0.0718	0.0718	0.0000	248.3705	248.3705	0.0803	0.0000	250.3787

Total	**0.1722**	**1.8693**	**0.8987**	**2.8300e-003**		**0.0781**	**0.0781**		**0.0718**	**0.0718**	**0.0000**	**248.3705**	**248.3705**	**0.0803**	**0.0000**	**250.3787**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0678	2.6435	0.9739	7.4600e-003	0.1920	3.8000e-003	0.1958	0.0555	3.6300e-003	0.0591	0.0000	772.6341	772.6341	0.1027	0.0000	775.2016
Worker	0.1460	0.0856	1.0396	4.2500e-003	0.4540	3.3400e-003	0.4574	0.1208	3.0800e-003	0.1239	0.0000	385.1852	385.1852	7.0000e-003	0.0000	385.3601
Total	**0.2138**	**2.7291**	**2.0135**	**0.0117**	**0.6461**	**7.1400e-003**	**0.6532**	**0.1763**	**6.7100e-003**	**0.1830**	**0.0000**	**1,157.8193**	**1,157.8193**	**0.1097**	**0.0000**	**1,160.5617**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	2.8300e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**2.8300e-003**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0678	2.6435	0.9739	7.4600e-003	0.1920	3.8000e-003	0.1958	0.0555	3.6300e-003	0.0591	0.0000	772.6341	772.6341	0.1027	0.0000	775.2016
Worker	0.1460	0.0856	1.0396	4.2500e-003	0.4540	3.3400e-003	0.4574	0.1208	3.0800e-003	0.1239	0.0000	385.1852	385.1852	7.0000e-003	0.0000	385.3601
Total	**0.2138**	**2.7291**	**2.0135**	**0.0117**	**0.6461**	**7.1400e-003**	**0.6532**	**0.1763**	**6.7100e-003**	**0.1830**	**0.0000**	**1,157.8193**	**1,157.8193**	**0.1097**	**0.0000**	**1,160.5617**

3.12 Phase 1-C,D,I (Electric Cranes Only) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1094	1.1556	0.5852	1.9000e-003		0.0481	0.0481		0.0442	0.0442	0.0000	167.1689	167.1689	0.0541	0.0000	168.5206
Total	**0.1094**	**1.1556**	**0.5852**	**1.9000e-003**		**0.0481**	**0.0481**		**0.0442**	**0.0442**	**0.0000**	**167.1689**	**167.1689**	**0.0541**	**0.0000**	**168.5206**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0436	1.7357	0.6489	4.9500e-003	0.1293	2.4500e-003	0.1317	0.0374	2.3400e-003	0.0397	0.0000	515.2179	515.2179	0.0690	0.0000	516.9436
Worker	0.0934	0.0524	0.6557	2.7500e-003	0.3056	2.2300e-003	0.3078	0.0813	2.0500e-003	0.0834	0.0000	248.9377	248.9377	4.2800e-003	0.0000	249.0446
Total	**0.1371**	**1.7881**	**1.3046**	**7.7000e-003**	**0.4349**	**4.6800e-003**	**0.4395**	**0.1187**	**4.3900e-003**	**0.1231**	**0.0000**	**764.1556**	**764.1556**	**0.0733**	**0.0000**	**765.9882**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	1.9000e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**1.9000e-003**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0436	1.7357	0.6489	4.9500e-003	0.1293	2.4500e-003	0.1317	0.0374	2.3400e-003	0.0397	0.0000	515.2179	515.2179	0.0690	0.0000	516.9436
Worker	0.0934	0.0524	0.6557	2.7500e-003	0.3056	2.2300e-003	0.3078	0.0813	2.0500e-003	0.0834	0.0000	248.9377	248.9377	4.2800e-003	0.0000	249.0446
Total	**0.1371**	**1.7881**	**1.3046**	**7.7000e-003**	**0.4349**	**4.6800e-003**	**0.4395**	**0.1187**	**4.3900e-003**	**0.1231**	**0.0000**	**764.1556**	**764.1556**	**0.0733**	**0.0000**	**765.9882**

3.13 Phase 1-E (Electric Cranes Only) - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0193	0.2161	0.0977	3.0000e-004		8.9700e-003	8.9700e-003		8.2500e-003	8.2500e-003	0.0000	26.1760	26.1760	8.4700e-003	0.0000	26.3877
Total	**0.0193**	**0.2161**	**0.0977**	**3.0000e-004**		**8.9700e-003**	**8.9700e-003**		**8.2500e-003**	**8.2500e-003**	**0.0000**	**26.1760**	**26.1760**	**8.4700e-003**	**0.0000**	**26.3877**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0134	0.5080	0.1607	1.2300e-003	0.0306	1.0600e-003	0.0317	8.8400e-003	1.0200e-003	9.8600e-003	0.0000	126.2105	126.2105	0.0167	0.0000	126.6290
Worker	0.0246	0.0151	0.1776	7.1000e-004	0.0724	5.4000e-004	0.0730	0.0193	5.0000e-004	0.0198	0.0000	63.9062	63.9062	1.2300e-003	0.0000	63.9370
Total	**0.0380**	**0.5230**	**0.3383**	**1.9400e-003**	**0.1030**	**1.6000e-003**	**0.1046**	**0.0281**	**1.5200e-003**	**0.0296**	**0.0000**	**190.1167**	**190.1167**	**0.0180**	**0.0000**	**190.5660**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	3.0000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**3.0000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0134	0.5080	0.1607	1.2300e-003	0.0306	1.0600e-003	0.0317	8.8400e-003	1.0200e-003	9.8600e-003	0.0000	126.2105	126.2105	0.0167	0.0000	126.6290
Worker	0.0246	0.0151	0.1776	7.1000e-004	0.0724	5.4000e-004	0.0730	0.0193	5.0000e-004	0.0198	0.0000	63.9062	63.9062	1.2300e-003	0.0000	63.9370
Total	**0.0380**	**0.5230**	**0.3383**	**1.9400e-003**	**0.1030**	**1.6000e-003**	**0.1046**	**0.0281**	**1.5200e-003**	**0.0296**	**0.0000**	**190.1167**	**190.1167**	**0.0180**	**0.0000**	**190.5660**

3.13 Phase 1-E (Electric Cranes Only) - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0606	0.6577	0.3162	9.9000e-004		0.0275	0.0275		0.0253	0.0253	0.0000	87.3859	87.3859	0.0283	0.0000	88.0925

Total	**0.0606**	**0.6577**	**0.3162**	**9.9000e-004**		**0.0275**	**0.0275**		**0.0253**	**0.0253**	**0.0000**	**87.3859**	**87.3859**	**0.0283**	**0.0000**	**88.0925**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0360	1.4058	0.5179	3.9700e-003	0.1021	2.0200e-003	0.1041	0.0295	1.9300e-003	0.0315	0.0000	410.8794	410.8794	0.0546	0.0000	412.2447
Worker	0.0778	0.0456	0.5536	2.2700e-003	0.2418	1.7800e-003	0.2436	0.0643	1.6400e-003	0.0660	0.0000	205.1081	205.1081	3.7300e-003	0.0000	205.2012
Total	**0.1138**	**1.4514**	**1.0715**	**6.2400e-003**	**0.3439**	**3.8000e-003**	**0.3477**	**0.0938**	**3.5700e-003**	**0.0974**	**0.0000**	**615.9875**	**615.9875**	**0.0583**	**0.0000**	**617.4460**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	9.9000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**9.9000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0360	1.4058	0.5179	3.9700e-003	0.1021	2.0200e-003	0.1041	0.0295	1.9300e-003	0.0315	0.0000	410.8794	410.8794	0.0546	0.0000	412.2447
Worker	0.0778	0.0456	0.5536	2.2700e-003	0.2418	1.7800e-003	0.2436	0.0643	1.6400e-003	0.0660	0.0000	205.1081	205.1081	3.7300e-003	0.0000	205.2012
Total	**0.1138**	**1.4514**	**1.0715**	**6.2400e-003**	**0.3439**	**3.8000e-003**	**0.3477**	**0.0938**	**3.5700e-003**	**0.0974**	**0.0000**	**615.9875**	**615.9875**	**0.0583**	**0.0000**	**617.4460**

3.14 Phase 1-TH Architectural Coatings1 - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0163					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.5100e-003	0.0380	0.0489	8.0000e-005		2.2000e-003	2.2000e-003		2.2000e-003	2.2000e-003	0.0000	6.8792	6.8792	4.5000e-004	0.0000	6.8904
Total	**0.0218**	**0.0380**	**0.0489**	**8.0000e-005**		**2.2000e-003**	**2.2000e-003**		**2.2000e-003**	**2.2000e-003**	**0.0000**	**6.8792**	**6.8792**	**4.5000e-004**	**0.0000**	**6.8904**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4200e-003	5.7600e-003	0.0680	2.7000e-004	0.0277	2.1000e-004	0.0279	7.3800e-003	1.9000e-004	7.5700e-003	0.0000	24.4747	24.4747	4.7000e-004	0.0000	24.4865
Total	**9.4200e-003**	**5.7600e-003**	**0.0680**	**2.7000e-004**	**0.0277**	**2.1000e-004**	**0.0279**	**7.3800e-003**	**1.9000e-004**	**7.5700e-003**	**0.0000**	**24.4747**	**24.4747**	**4.7000e-004**	**0.0000**	**24.4865**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0163					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.4700e-003	0.0286	0.0494	8.0000e-005		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0000	6.8792	6.8792	4.5000e-004	0.0000	6.8904
Total	**0.0177**	**0.0286**	**0.0494**	**8.0000e-005**		**1.1000e-004**	**1.1000e-004**		**1.1000e-004**	**1.1000e-004**	**0.0000**	**6.8792**	**6.8792**	**4.5000e-004**	**0.0000**	**6.8904**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.4200e-003	5.7600e-003	0.0680	2.7000e-004	0.0277	2.1000e-004	0.0279	7.3800e-003	1.9000e-004	7.5700e-003	0.0000	24.4747	24.4747	4.7000e-004	0.0000	24.4865
Total	**9.4200e-003**	**5.7600e-003**	**0.0680**	**2.7000e-004**	**0.0277**	**2.1000e-004**	**0.0279**	**7.3800e-003**	**1.9000e-004**	**7.5700e-003**	**0.0000**	**24.4747**	**24.4747**	**4.7000e-004**	**0.0000**	**24.4865**

3.14 Phase 1-TH Architectural Coatings1 - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0213					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7500e-003	0.0459	0.0638	1.0000e-004		2.5000e-003	2.5000e-003		2.5000e-003	2.5000e-003	0.0000	8.9959	8.9959	5.4000e-004	0.0000	9.0094
Total	**0.0280**	**0.0459**	**0.0638**	**1.0000e-004**		**2.5000e-003**	**2.5000e-003**		**2.5000e-003**	**2.5000e-003**	**0.0000**	**8.9959**	**8.9959**	**5.4000e-004**	**0.0000**	**9.0094**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0117	6.8300e-003	0.0831	3.4000e-004	0.0363	2.7000e-004	0.0365	9.6500e-003	2.5000e-004	9.8900e-003	0.0000	30.7692	30.7692	5.6000e-004	0.0000	30.7832
Total	**0.0117**	**6.8300e-003**	**0.0831**	**3.4000e-004**	**0.0363**	**2.7000e-004**	**0.0365**	**9.6500e-003**	**2.5000e-004**	**9.8900e-003**	**0.0000**	**30.7692**	**30.7692**	**5.6000e-004**	**0.0000**	**30.7832**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0213					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0373	0.0646	1.0000e-004		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004	0.0000	8.9959	8.9959	5.4000e-004	0.0000	9.0094
Total	**0.0232**	**0.0373**	**0.0646**	**1.0000e-004**		**1.4000e-004**	**1.4000e-004**		**1.4000e-004**	**1.4000e-004**	**0.0000**	**8.9959**	**8.9959**	**5.4000e-004**	**0.0000**	**9.0094**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0117	6.8300e-003	0.0831	3.4000e-004	0.0363	2.7000e-004	0.0365	9.6500e-003	2.5000e-004	9.8900e-003	0.0000	30.7692	30.7692	5.6000e-004	0.0000	30.7832
Total	**0.0117**	**6.8300e-003**	**0.0831**	**3.4000e-004**	**0.0363**	**2.7000e-004**	**0.0365**	**9.6500e-003**	**2.5000e-004**	**9.8900e-003**	**0.0000**	**30.7692**	**30.7692**	**5.6000e-004**	**0.0000**	**30.7832**

3.15 Phase 1-TH (HD Equipment Mix2) - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0303	0.2599	0.3105	9.1000e-004		0.0102	0.0102		9.7200e-003	9.7200e-003	0.0000	79.5604	79.5604	0.0202	0.0000	80.0665

Total	**0.0303**	**0.2599**	**0.3105**	**9.1000e-004**		**0.0102**	**0.0102**		**9.7200e-003**	**9.7200e-003**	**0.0000**	**79.5604**	**79.5604**	**0.0202**	**0.0000**	**80.0665**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4800e-003	0.2527	0.0931	7.1000e-004	0.0184	3.6000e-004	0.0187	5.3000e-003	3.5000e-004	5.6500e-003	0.0000	73.8447	73.8447	9.8200e-003	0.0000	74.0901
Worker	0.0148	8.6800e-003	0.1055	4.3000e-004	0.0461	3.4000e-004	0.0464	0.0123	3.1000e-004	0.0126	0.0000	39.0950	39.0950	7.1000e-004	0.0000	39.1128
Total	**0.0213**	**0.2613**	**0.1986**	**1.1400e-003**	**0.0644**	**7.0000e-004**	**0.0651**	**0.0176**	**6.6000e-004**	**0.0182**	**0.0000**	**112.9397**	**112.9397**	**0.0105**	**0.0000**	**113.2028**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0158	0.2801	0.5161	9.1000e-004		2.9000e-003	2.9000e-003		2.9000e-003	2.9000e-003	0.0000	79.5603	79.5603	0.0202	0.0000	80.0664
Total	**0.0158**	**0.2801**	**0.5161**	**9.1000e-004**		**2.9000e-003**	**2.9000e-003**		**2.9000e-003**	**2.9000e-003**	**0.0000**	**79.5603**	**79.5603**	**0.0202**	**0.0000**	**80.0664**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4800e-003	0.2527	0.0931	7.1000e-004	0.0184	3.6000e-004	0.0187	5.3000e-003	3.5000e-004	5.6500e-003	0.0000	73.8447	73.8447	9.8200e-003	0.0000	74.0901
Worker	0.0148	8.6800e-003	0.1055	4.3000e-004	0.0461	3.4000e-004	0.0464	0.0123	3.1000e-004	0.0126	0.0000	39.0950	39.0950	7.1000e-004	0.0000	39.1128
Total	**0.0213**	**0.2613**	**0.1986**	**1.1400e-003**	**0.0644**	**7.0000e-004**	**0.0651**	**0.0176**	**6.6000e-004**	**0.0182**	**0.0000**	**112.9397**	**112.9397**	**0.0105**	**0.0000**	**113.2028**

3.16 Phase 1-E Architectural Coatings - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1233					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0309	0.2098	0.2916	4.8000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	41.1046	41.1046	2.4600e-003	0.0000	41.1661
Total	**0.1541**	**0.2098**	**0.2916**	**4.8000e-004**		**0.0114**	**0.0114**		**0.0114**	**0.0114**	**0.0000**	**41.1046**	**41.1046**	**2.4600e-003**	**0.0000**	**41.1661**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0545	0.0319	0.3878	1.5900e-003	0.1694	1.2500e-003	0.1706	0.0451	1.1500e-003	0.0462	0.0000	143.6702	143.6702	2.6100e-003	0.0000	143.7354
Total	**0.0545**	**0.0319**	**0.3878**	**1.5900e-003**	**0.1694**	**1.2500e-003**	**0.1706**	**0.0451**	**1.1500e-003**	**0.0462**	**0.0000**	**143.6702**	**143.6702**	**2.6100e-003**	**0.0000**	**143.7354**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1233					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.7700e-003	0.1706	0.2950	4.8000e-004		6.4000e-004	6.4000e-004		6.4000e-004	6.4000e-004	0.0000	41.1046	41.1046	2.4600e-003	0.0000	41.1661
Total	**0.1320**	**0.1706**	**0.2950**	**4.8000e-004**		**6.4000e-004**	**6.4000e-004**		**6.4000e-004**	**6.4000e-004**	**0.0000**	**41.1046**	**41.1046**	**2.4600e-003**	**0.0000**	**41.1661**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0545	0.0319	0.3878	1.5900e-003	0.1694	1.2500e-003	0.1706	0.0451	1.1500e-003	0.0462	0.0000	143.6702	143.6702	2.6100e-003	0.0000	143.7354
Total	**0.0545**	**0.0319**	**0.3878**	**1.5900e-003**	**0.1694**	**1.2500e-003**	**0.1706**	**0.0451**	**1.1500e-003**	**0.0462**	**0.0000**	**143.6702**	**143.6702**	**2.6100e-003**	**0.0000**	**143.7354**

3.17 Phase 1-TH (No HD Equipment1) - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.1700e-003	0.0181	0.0370	6.0000e-005		3.1000e-004	3.1000e-004		2.9000e-004	2.9000e-004	0.0000	4.9991	4.9991	1.6200e-003	0.0000	5.0395
Total	**1.1700e-003**	**0.0181**	**0.0370**	**6.0000e-005**		**3.1000e-004**	**3.1000e-004**		**2.9000e-004**	**2.9000e-004**	**0.0000**	**4.9991**	**4.9991**	**1.6200e-003**	**0.0000**	**5.0395**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.5400e-003	0.2550	0.0939	7.2000e-004	0.0185	3.7000e-004	0.0189	5.3500e-003	3.5000e-004	5.7000e-003	0.0000	74.5284	74.5284	9.9100e-003	0.0000	74.7761
Worker	0.0150	8.7600e-003	0.1065	4.4000e-004	0.0465	3.4000e-004	0.0469	0.0124	3.2000e-004	0.0127	0.0000	39.4570	39.4570	7.2000e-004	0.0000	39.4749
Total	**0.0215**	**0.2638**	**0.2004**	**1.1600e-003**	**0.0650**	**7.1000e-004**	**0.0657**	**0.0177**	**6.7000e-004**	**0.0184**	**0.0000**	**113.9854**	**113.9854**	**0.0106**	**0.0000**	**114.2510**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	6.0000e-005		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**6.0000e-005**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.5400e-003	0.2550	0.0939	7.2000e-004	0.0185	3.7000e-004	0.0189	5.3500e-003	3.5000e-004	5.7000e-003	0.0000	74.5284	74.5284	9.9100e-003	0.0000	74.7761
Worker	0.0150	8.7600e-003	0.1065	4.4000e-004	0.0465	3.4000e-004	0.0469	0.0124	3.2000e-004	0.0127	0.0000	39.4570	39.4570	7.2000e-004	0.0000	39.4749
Total	**0.0215**	**0.2638**	**0.2004**	**1.1600e-003**	**0.0650**	**7.1000e-004**	**0.0657**	**0.0177**	**6.7000e-004**	**0.0184**	**0.0000**	**113.9854**	**113.9854**	**0.0106**	**0.0000**	**114.2510**

3.18 Phase 1-TH (Gradealls Only) - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.7600e-003	0.0365	0.0597	9.0000e-005		1.1700e-003	1.1700e-003		1.0800e-003	1.0800e-003	0.0000	7.9079	7.9079	2.5600e-003	0.0000	7.9718

Total	**2.7600e-003**	**0.0365**	**0.0597**	**9.0000e-005**		**1.1700e-003**	**1.1700e-003**		**1.0800e-003**	**1.0800e-003**	**0.0000**	**7.9079**	**7.9079**	**2.5600e-003**	**0.0000**	**7.9718**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2600e-003	0.0491	0.0181	1.4000e-004	3.5700e-003	7.0000e-005	3.6400e-003	1.0300e-003	7.0000e-005	1.1000e-003	0.0000	14.3587	14.3587	1.9100e-003	0.0000	14.4064
Worker	2.8800e-003	1.6900e-003	0.0205	8.0000e-005	8.9600e-003	7.0000e-005	9.0300e-003	2.3800e-003	6.0000e-005	2.4400e-003	0.0000	7.6018	7.6018	1.4000e-004	0.0000	7.6053
Total	**4.1400e-003**	**0.0508**	**0.0386**	**2.2000e-004**	**0.0125**	**1.4000e-004**	**0.0127**	**3.4100e-003**	**1.3000e-004**	**3.5400e-003**	**0.0000**	**21.9605**	**21.9605**	**2.0500e-003**	**0.0000**	**22.0117**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.0300e-003	0.0394	0.0682	9.0000e-005		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004	0.0000	7.9079	7.9079	2.5600e-003	0.0000	7.9718
Total	**2.0300e-003**	**0.0394**	**0.0682**	**9.0000e-005**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**	**0.0000**	**7.9079**	**7.9079**	**2.5600e-003**	**0.0000**	**7.9718**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2600e-003	0.0491	0.0181	1.4000e-004	3.5700e-003	7.0000e-005	3.6400e-003	1.0300e-003	7.0000e-005	1.1000e-003	0.0000	14.3587	14.3587	1.9100e-003	0.0000	14.4064
Worker	2.8800e-003	1.6900e-003	0.0205	8.0000e-005	8.9600e-003	7.0000e-005	9.0300e-003	2.3800e-003	6.0000e-005	2.4400e-003	0.0000	7.6018	7.6018	1.4000e-004	0.0000	7.6053
Total	**4.1400e-003**	**0.0508**	**0.0386**	**2.2000e-004**	**0.0125**	**1.4000e-004**	**0.0127**	**3.4100e-003**	**1.3000e-004**	**3.5400e-003**	**0.0000**	**21.9605**	**21.9605**	**2.0500e-003**	**0.0000**	**22.0117**

3.18 Phase 1-TH (Gradealls Only) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0140	0.1847	0.3131	4.7000e-004		5.6200e-003	5.6200e-003		5.1700e-003	5.1700e-003	0.0000	41.4139	41.4139	0.0134	0.0000	41.7487
Total	**0.0140**	**0.1847**	**0.3131**	**4.7000e-004**		**5.6200e-003**	**5.6200e-003**		**5.1700e-003**	**5.1700e-003**	**0.0000**	**41.4139**	**41.4139**	**0.0134**	**0.0000**	**41.7487**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.3100e-003	0.2510	0.0939	7.2000e-004	0.0187	3.5000e-004	0.0191	5.4000e-003	3.4000e-004	5.7400e-003	0.0000	74.5145	74.5145	9.9800e-003	0.0000	74.7640
Worker	0.0144	8.0500e-003	0.1007	4.2000e-004	0.0469	3.4000e-004	0.0473	0.0125	3.1000e-004	0.0128	0.0000	38.2337	38.2337	6.6000e-004	0.0000	38.2502
Total	**0.0207**	**0.2591**	**0.1946**	**1.1400e-003**	**0.0656**	**6.9000e-004**	**0.0663**	**0.0179**	**6.5000e-004**	**0.0185**	**0.0000**	**112.7482**	**112.7482**	**0.0106**	**0.0000**	**113.0142**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0106	0.2065	0.3571	4.7000e-004		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004	0.0000	41.4138	41.4138	0.0134	0.0000	41.7487
Total	**0.0106**	**0.2065**	**0.3571**	**4.7000e-004**		**7.7000e-004**	**7.7000e-004**		**7.7000e-004**	**7.7000e-004**	**0.0000**	**41.4138**	**41.4138**	**0.0134**	**0.0000**	**41.7487**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.3100e-003	0.2510	0.0939	7.2000e-004	0.0187	3.5000e-004	0.0191	5.4000e-003	3.4000e-004	5.7400e-003	0.0000	74.5145	74.5145	9.9800e-003	0.0000	74.7640
Worker	0.0144	8.0500e-003	0.1007	4.2000e-004	0.0469	3.4000e-004	0.0473	0.0125	3.1000e-004	0.0128	0.0000	38.2337	38.2337	6.6000e-004	0.0000	38.2502
Total	**0.0207**	**0.2591**	**0.1946**	**1.1400e-003**	**0.0656**	**6.9000e-004**	**0.0663**	**0.0179**	**6.5000e-004**	**0.0185**	**0.0000**	**112.7482**	**112.7482**	**0.0106**	**0.0000**	**113.0142**

3.19 Phase 1-F Architectural Coatings - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1020					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0193	0.1302	0.1934	3.2000e-004		6.5100e-003	6.5100e-003		6.5100e-003	6.5100e-003	0.0000	27.2777	27.2777	1.5400e-003	0.0000	27.3161
Total	**0.1213**	**0.1302**	**0.1934**	**3.2000e-004**		**6.5100e-003**	**6.5100e-003**		**6.5100e-003**	**6.5100e-003**	**0.0000**	**27.2777**	**27.2777**	**1.5400e-003**	**0.0000**	**27.3161**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0288	0.0161	0.2017	8.5000e-004	0.0940	6.8000e-004	0.0947	0.0250	6.3000e-004	0.0257	0.0000	76.5962	76.5962	1.3200e-003	0.0000	76.6291
Total	**0.0288**	**0.0161**	**0.2017**	**8.5000e-004**	**0.0940**	**6.8000e-004**	**0.0947**	**0.0250**	**6.3000e-004**	**0.0257**	**0.0000**	**76.5962**	**76.5962**	**1.3200e-003**	**0.0000**	**76.6291**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1020					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.8200e-003	0.1132	0.1958	3.2000e-004		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004	0.0000	27.2777	27.2777	1.5400e-003	0.0000	27.3161
Total	**0.1078**	**0.1132**	**0.1958**	**3.2000e-004**		**4.2000e-004**	**4.2000e-004**		**4.2000e-004**	**4.2000e-004**	**0.0000**	**27.2777**	**27.2777**	**1.5400e-003**	**0.0000**	**27.3161**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0288	0.0161	0.2017	8.5000e-004	0.0940	6.8000e-004	0.0947	0.0250	6.3000e-004	0.0257	0.0000	76.5962	76.5962	1.3200e-003	0.0000	76.6291
Total	**0.0288**	**0.0161**	**0.2017**	**8.5000e-004**	**0.0940**	**6.8000e-004**	**0.0947**	**0.0250**	**6.3000e-004**	**0.0257**	**0.0000**	**76.5962**	**76.5962**	**1.3200e-003**	**0.0000**	**76.6291**

3.20 Phase 1-C,D,I Architectural Coatings - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2713					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0690	0.4655	0.6913	1.1300e-003		0.0233	0.0233		0.0233	0.0233	0.0000	97.5070	97.5070	5.4900e-003	0.0000	97.6443
Total	**0.3403**	**0.4655**	**0.6913**	**1.1300e-003**		**0.0233**	**0.0233**		**0.0233**	**0.0233**	**0.0000**	**97.5070**	**97.5070**	**5.4900e-003**	**0.0000**	**97.6443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0812	0.0455	0.5695	2.3900e-003	0.2654	1.9300e-003	0.2674	0.0706	1.7800e-003	0.0724	0.0000	216.2201	216.2201	3.7200e-003	0.0000	216.3130
Total	**0.0812**	**0.0455**	**0.5695**	**2.3900e-003**	**0.2654**	**1.9300e-003**	**0.2674**	**0.0706**	**1.7800e-003**	**0.0724**	**0.0000**	**216.2201**	**216.2201**	**3.7200e-003**	**0.0000**	**216.3130**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2713					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0208	0.4047	0.6998	1.1300e-003		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	97.5069	97.5069	5.4900e-003	0.0000	97.6442
Total	**0.2921**	**0.4047**	**0.6998**	**1.1300e-003**		**1.5100e-003**	**1.5100e-003**		**1.5100e-003**	**1.5100e-003**	**0.0000**	**97.5069**	**97.5069**	**5.4900e-003**	**0.0000**	**97.6442**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0812	0.0455	0.5695	2.3900e-003	0.2654	1.9300e-003	0.2674	0.0706	1.7800e-003	0.0724	0.0000	216.2201	216.2201	3.7200e-003	0.0000	216.3130
Total	**0.0812**	**0.0455**	**0.5695**	**2.3900e-003**	**0.2654**	**1.9300e-003**	**0.2674**	**0.0706**	**1.7800e-003**	**0.0724**	**0.0000**	**216.2201**	**216.2201**	**3.7200e-003**	**0.0000**	**216.3130**

3.21 Phase 1-TH Architectural Coatings2 - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0375					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.0768	0.1141	1.9000e-004		3.8400e-003	3.8400e-003		3.8400e-003	3.8400e-003	0.0000	16.0868	16.0868	9.1000e-004	0.0000	16.1095
Total	**0.0489**	**0.0768**	**0.1141**	**1.9000e-004**		**3.8400e-003**	**3.8400e-003**		**3.8400e-003**	**3.8400e-003**	**0.0000**	**16.0868**	**16.0868**	**9.1000e-004**	**0.0000**	**16.1095**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0198	0.0111	0.1392	5.8000e-004	0.0649	4.7000e-004	0.0653	0.0173	4.3000e-004	0.0177	0.0000	52.8321	52.8321	9.1000e-004	0.0000	52.8548
Total	**0.0198**	**0.0111**	**0.1392**	**5.8000e-004**	**0.0649**	**4.7000e-004**	**0.0653**	**0.0173**	**4.3000e-004**	**0.0177**	**0.0000**	**52.8321**	**52.8321**	**9.1000e-004**	**0.0000**	**52.8548**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0375					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4300e-003	0.0668	0.1155	1.9000e-004		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	16.0868	16.0868	9.1000e-004	0.0000	16.1095
Total	**0.0410**	**0.0668**	**0.1155**	**1.9000e-004**		**2.5000e-004**	**2.5000e-004**		**2.5000e-004**	**2.5000e-004**	**0.0000**	**16.0868**	**16.0868**	**9.1000e-004**	**0.0000**	**16.1095**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0198	0.0111	0.1392	5.8000e-004	0.0649	4.7000e-004	0.0653	0.0173	4.3000e-004	0.0177	0.0000	52.8321	52.8321	9.1000e-004	0.0000	52.8548
Total	**0.0198**	**0.0111**	**0.1392**	**5.8000e-004**	**0.0649**	**4.7000e-004**	**0.0653**	**0.0173**	**4.3000e-004**	**0.0177**	**0.0000**	**52.8321**	**52.8321**	**9.1000e-004**	**0.0000**	**52.8548**

3.22 Phase 1-TH (Excavator/BobCats Only) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.5500e-003	0.0200	0.0274	1.0000e-004		6.8000e-004	6.8000e-004		6.2000e-004	6.2000e-004	0.0000	8.7246	8.7246	2.8200e-003	0.0000	8.7951
Total	**2.5500e-003**	**0.0200**	**0.0274**	**1.0000e-004**		**6.8000e-004**	**6.8000e-004**		**6.2000e-004**	**6.2000e-004**	**0.0000**	**8.7246**	**8.7246**	**2.8200e-003**	**0.0000**	**8.7951**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1500e-003	0.0456	0.0171	1.3000e-004	3.4000e-003	6.0000e-005	3.4600e-003	9.8000e-004	6.0000e-005	1.0400e-003	0.0000	13.5481	13.5481	1.8200e-003	0.0000	13.5935
Worker	2.6100e-003	1.4600e-003	0.0183	8.0000e-005	8.5300e-003	6.0000e-005	8.6000e-003	2.2700e-003	6.0000e-005	2.3300e-003	0.0000	6.9516	6.9516	1.2000e-004	0.0000	6.9546
Total	**3.7600e-003**	**0.0471**	**0.0354**	**2.1000e-004**	**0.0119**	**1.2000e-004**	**0.0121**	**3.2500e-003**	**1.2000e-004**	**3.3700e-003**	**0.0000**	**20.4997**	**20.4997**	**1.9400e-003**	**0.0000**	**20.5480**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.7400e-003	0.0302	0.0561	1.0000e-004		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	8.7246	8.7246	2.8200e-003	0.0000	8.7951
Total	**1.7400e-003**	**0.0302**	**0.0561**	**1.0000e-004**		**4.4000e-004**	**4.4000e-004**		**4.4000e-004**	**4.4000e-004**	**0.0000**	**8.7246**	**8.7246**	**2.8200e-003**	**0.0000**	**8.7951**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1500e-003	0.0456	0.0171	1.3000e-004	3.4000e-003	6.0000e-005	3.4600e-003	9.8000e-004	6.0000e-005	1.0400e-003	0.0000	13.5481	13.5481	1.8200e-003	0.0000	13.5935
Worker	2.6100e-003	1.4600e-003	0.0183	8.0000e-005	8.5300e-003	6.0000e-005	8.6000e-003	2.2700e-003	6.0000e-005	2.3300e-003	0.0000	6.9516	6.9516	1.2000e-004	0.0000	6.9546
Total	**3.7600e-003**	**0.0471**	**0.0354**	**2.1000e-004**	**0.0119**	**1.2000e-004**	**0.0121**	**3.2500e-003**	**1.2000e-004**	**3.3700e-003**	**0.0000**	**20.4997**	**20.4997**	**1.9400e-003**	**0.0000**	**20.5480**

3.23 Phase 1-TH (No HD Equipment2) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.8000e-004	7.3600e-003	0.0153	2.0000e-005		1.3000e-004	1.3000e-004		1.2000e-004	1.2000e-004	0.0000	2.0638	2.0638	6.7000e-004	0.0000	2.0805

Total	**4.8000e-004**	**7.3600e-003**	**0.0153**	**2.0000e-005**		**1.3000e-004**	**1.3000e-004**		**1.2000e-004**	**1.2000e-004**	**0.0000**	**2.0638**	**2.0638**	**6.7000e-004**	**0.0000**	**2.0805**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5800e-003	0.1027	0.0384	2.9000e-004	7.6500e-003	1.4000e-004	7.7900e-003	2.2100e-003	1.4000e-004	2.3500e-003	0.0000	30.4832	30.4832	4.0800e-003	0.0000	30.5853
Worker	5.8700e-003	3.2900e-003	0.0412	1.7000e-004	0.0192	1.4000e-004	0.0193	5.1100e-003	1.3000e-004	5.2400e-003	0.0000	15.6411	15.6411	2.7000e-004	0.0000	15.6478
Total	**8.4500e-003**	**0.1060**	**0.0796**	**4.6000e-004**	**0.0269**	**2.8000e-004**	**0.0271**	**7.3200e-003**	**2.7000e-004**	**7.5900e-003**	**0.0000**	**46.1243**	**46.1243**	**4.3500e-003**	**0.0000**	**46.2331**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	2.0000e-005		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**2.0000e-005**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5800e-003	0.1027	0.0384	2.9000e-004	7.6500e-003	1.4000e-004	7.7900e-003	2.2100e-003	1.4000e-004	2.3500e-003	0.0000	30.4832	30.4832	4.0800e-003	0.0000	30.5853
Worker	5.8700e-003	3.2900e-003	0.0412	1.7000e-004	0.0192	1.4000e-004	0.0193	5.1100e-003	1.3000e-004	5.2400e-003	0.0000	15.6411	15.6411	2.7000e-004	0.0000	15.6478
Total	**8.4500e-003**	**0.1060**	**0.0796**	**4.6000e-004**	**0.0269**	**2.8000e-004**	**0.0271**	**7.3200e-003**	**2.7000e-004**	**7.5900e-003**	**0.0000**	**46.1243**	**46.1243**	**4.3500e-003**	**0.0000**	**46.2331**

3.24 Phase 2-Material Off-Haul (No HD Equipment) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	8.1000e-004	0.0124	0.0257	4.0000e-005		2.1000e-004	2.1000e-004		2.0000e-004	2.0000e-004	0.0000	3.4669	3.4669	1.1200e-003	0.0000	3.4949
Total	**8.1000e-004**	**0.0124**	**0.0257**	**4.0000e-005**		**2.1000e-004**	**2.1000e-004**		**2.0000e-004**	**2.0000e-004**	**0.0000**	**3.4669**	**3.4669**	**1.1200e-003**	**0.0000**	**3.4949**

Unmitigated Construction Off-Site

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

Hauling	0.0274	1.0833	0.5763	3.8800e-003	0.0876	2.2300e-003	0.0899	0.0241	2.1300e-003	0.0262	0.0000	426.2822	426.2822	0.0848	0.0000	428.4016
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0274**	**1.0833**	**0.5763**	**3.8800e-003**	**0.0876**	**2.2300e-003**	**0.0899**	**0.0241**	**2.1300e-003**	**0.0262**	**0.0000**	**426.2822**	**426.2822**	**0.0848**	**0.0000**	**428.4016**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	4.0000e-005		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**4.0000e-005**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0274	1.0833	0.5763	3.8800e-003	0.0876	2.2300e-003	0.0899	0.0241	2.1300e-003	0.0262	0.0000	426.2822	426.2822	0.0848	0.0000	428.4016
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0274**	**1.0833**	**0.5763**	**3.8800e-003**	**0.0876**	**2.2300e-003**	**0.0899**	**0.0241**	**2.1300e-003**	**0.0262**	**0.0000**	**426.2822**	**426.2822**	**0.0848**	**0.0000**	**428.4016**

3.25 Phase 2-G,A,H (HD Equipment Mix) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1211	0.9843	1.3638	3.0800e-003		0.0411	0.0411		0.0402	0.0402	0.0000	267.2400	267.2400	0.0477	0.0000	268.4317
Total	**0.1211**	**0.9843**	**1.3638**	**3.0800e-003**		**0.0411**	**0.0411**		**0.0402**	**0.0402**	**0.0000**	**267.2400**	**267.2400**	**0.0477**	**0.0000**	**268.4317**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0294	1.1683	0.4368	3.3300e-003	0.0870	1.6500e-003	0.0887	0.0252	1.5800e-003	0.0267	0.0000	346.8048	346.8048	0.0465	0.0000	347.9664
Worker	0.0628	0.0352	0.4410	1.8500e-003	0.2056	1.5000e-003	0.2071	0.0547	1.3800e-003	0.0561	0.0000	167.4367	167.4367	2.8800e-003	0.0000	167.5087
Total	**0.0922**	**1.2036**	**0.8778**	**5.1800e-003**	**0.2926**	**3.1500e-003**	**0.2957**	**0.0798**	**2.9600e-003**	**0.0828**	**0.0000**	**514.2416**	**514.2416**	**0.0493**	**0.0000**	**515.4751**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0554	1.0308	1.8237	3.0800e-003		9.6300e-003	9.6300e-003		9.6300e-003	9.6300e-003	0.0000	267.2397	267.2397	0.0477	0.0000	268.4314
Total	**0.0554**	**1.0308**	**1.8237**	**3.0800e-003**		**9.6300e-003**	**9.6300e-003**		**9.6300e-003**	**9.6300e-003**	**0.0000**	**267.2397**	**267.2397**	**0.0477**	**0.0000**	**268.4314**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0294	1.1683	0.4368	3.3300e-003	0.0870	1.6500e-003	0.0887	0.0252	1.5800e-003	0.0267	0.0000	346.8048	346.8048	0.0465	0.0000	347.9664
Worker	0.0628	0.0352	0.4410	1.8500e-003	0.2056	1.5000e-003	0.2071	0.0547	1.3800e-003	0.0561	0.0000	167.4367	167.4367	2.8800e-003	0.0000	167.5087
Total	**0.0922**	**1.2036**	**0.8778**	**5.1800e-003**	**0.2926**	**3.1500e-003**	**0.2957**	**0.0798**	**2.9600e-003**	**0.0828**	**0.0000**	**514.2416**	**514.2416**	**0.0493**	**0.0000**	**515.4751**

3.25 Phase 2-G,A,H (HD Equipment Mix) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0839	0.6685	1.0015	2.2700e-003		0.0262	0.0262		0.0256	0.0256	0.0000	196.6834	196.6834	0.0348	0.0000	197.5534

Total	**0.0839**	**0.6685**	**1.0015**	**2.2700e-003**		**0.0262**	**0.0262**		**0.0256**	**0.0256**	**0.0000**	**196.6834**	**196.6834**	**0.0348**	**0.0000**	**197.5534**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0208	0.8385	0.3217	2.4200e-003	0.0640	1.1600e-003	0.0652	0.0185	1.1100e-003	0.0196	0.0000	252.7850	252.7850	0.0342	0.0000	253.6395
Worker	0.0442	0.0237	0.3031	1.3000e-003	0.1512	1.0900e-003	0.1523	0.0402	1.0000e-003	0.0412	0.0000	118.1337	118.1337	1.9300e-003	0.0000	118.1820
Total	**0.0650**	**0.8622**	**0.6249**	**3.7200e-003**	**0.2152**	**2.2500e-003**	**0.2175**	**0.0587**	**2.1100e-003**	**0.0608**	**0.0000**	**370.9187**	**370.9187**	**0.0361**	**0.0000**	**371.8215**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0407	0.7583	1.3415	2.2700e-003		7.0800e-003	7.0800e-003		7.0800e-003	7.0800e-003	0.0000	196.6831	196.6831	0.0348	0.0000	197.5531
Total	**0.0407**	**0.7583**	**1.3415**	**2.2700e-003**		**7.0800e-003**	**7.0800e-003**		**7.0800e-003**	**7.0800e-003**	**0.0000**	**196.6831**	**196.6831**	**0.0348**	**0.0000**	**197.5531**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0208	0.8385	0.3217	2.4200e-003	0.0640	1.1600e-003	0.0652	0.0185	1.1100e-003	0.0196	0.0000	252.7850	252.7850	0.0342	0.0000	253.6395
Worker	0.0442	0.0237	0.3031	1.3000e-003	0.1512	1.0900e-003	0.1523	0.0402	1.0000e-003	0.0412	0.0000	118.1337	118.1337	1.9300e-003	0.0000	118.1820
Total	**0.0650**	**0.8622**	**0.6249**	**3.7200e-003**	**0.2152**	**2.2500e-003**	**0.2175**	**0.0587**	**2.1100e-003**	**0.0608**	**0.0000**	**370.9187**	**370.9187**	**0.0361**	**0.0000**	**371.8215**

3.26 Phase 2-B (HD Equipment Mix) - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0684	0.5538	0.7651	1.8000e-003		0.0228	0.0228		0.0223	0.0223	0.0000	156.2989	156.2989	0.0303	0.0000	157.0564
Total	**0.0684**	**0.5538**	**0.7651**	**1.8000e-003**		**0.0228**	**0.0228**		**0.0223**	**0.0223**	**0.0000**	**156.2989**	**156.2989**	**0.0303**	**0.0000**	**157.0564**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0125	0.4964	0.1856	1.4200e-003	0.0370	7.0000e-004	0.0377	0.0107	6.7000e-004	0.0114	0.0000	147.3354	147.3354	0.0197	0.0000	147.8289
Worker	0.0267	0.0150	0.1873	7.9000e-004	0.0873	6.4000e-004	0.0879	0.0232	5.9000e-004	0.0238	0.0000	71.1186	71.1186	1.2200e-003	0.0000	71.1492
Total	**0.0392**	**0.5113**	**0.3729**	**2.2100e-003**	**0.1243**	**1.3400e-003**	**0.1256**	**0.0339**	**1.2600e-003**	**0.0352**	**0.0000**	**218.4540**	**218.4540**	**0.0210**	**0.0000**	**218.9780**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0322	0.5948	1.0574	1.8000e-003		5.8600e-003	5.8600e-003		5.8600e-003	5.8600e-003	0.0000	156.2987	156.2987	0.0303	0.0000	157.0562
Total	**0.0322**	**0.5948**	**1.0574**	**1.8000e-003**		**5.8600e-003**	**5.8600e-003**		**5.8600e-003**	**5.8600e-003**	**0.0000**	**156.2987**	**156.2987**	**0.0303**	**0.0000**	**157.0562**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0125	0.4964	0.1856	1.4200e-003	0.0370	7.0000e-004	0.0377	0.0107	6.7000e-004	0.0114	0.0000	147.3354	147.3354	0.0197	0.0000	147.8289
Worker	0.0267	0.0150	0.1873	7.9000e-004	0.0873	6.4000e-004	0.0879	0.0232	5.9000e-004	0.0238	0.0000	71.1186	71.1186	1.2200e-003	0.0000	71.1492
Total	**0.0392**	**0.5113**	**0.3729**	**2.2100e-003**	**0.1243**	**1.3400e-003**	**0.1256**	**0.0339**	**1.2600e-003**	**0.0352**	**0.0000**	**218.4540**	**218.4540**	**0.0210**	**0.0000**	**218.9780**

3.26 Phase 2-B (HD Equipment Mix) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0474	0.3755	0.5618	1.3300e-003		0.0146	0.0146		0.0142	0.0142	0.0000	115.0395	115.0395	0.0222	0.0000	115.5934
Total	**0.0474**	**0.3755**	**0.5618**	**1.3300e-003**		**0.0146**	**0.0146**		**0.0142**	**0.0142**	**0.0000**	**115.0395**	**115.0395**	**0.0222**	**0.0000**	**115.5934**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.8500e-003	0.3562	0.1367	1.0300e-003	0.0272	4.9000e-004	0.0277	7.8600e-003	4.7000e-004	8.3300e-003	0.0000	107.3923	107.3923	0.0145	0.0000	107.7553
Worker	0.0188	0.0101	0.1288	5.5000e-004	0.0642	4.6000e-004	0.0647	0.0171	4.3000e-004	0.0175	0.0000	50.1772	50.1772	8.2000e-004	0.0000	50.1977
Total	**0.0276**	**0.3663**	**0.2654**	**1.5800e-003**	**0.0914**	**9.5000e-004**	**0.0924**	**0.0250**	**9.0000e-004**	**0.0258**	**0.0000**	**157.5695**	**157.5695**	**0.0153**	**0.0000**	**157.9531**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0237	0.4376	0.7778	1.3300e-003		4.3100e-003	4.3100e-003		4.3100e-003	4.3100e-003	0.0000	115.0394	115.0394	0.0222	0.0000	115.5932
Total	**0.0237**	**0.4376**	**0.7778**	**1.3300e-003**		**4.3100e-003**	**4.3100e-003**		**4.3100e-003**	**4.3100e-003**	**0.0000**	**115.0394**	**115.0394**	**0.0222**	**0.0000**	**115.5932**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.8500e-003	0.3562	0.1367	1.0300e-003	0.0272	4.9000e-004	0.0277	7.8600e-003	4.7000e-004	8.3300e-003	0.0000	107.3923	107.3923	0.0145	0.0000	107.7553
Worker	0.0188	0.0101	0.1288	5.5000e-004	0.0642	4.6000e-004	0.0647	0.0171	4.3000e-004	0.0175	0.0000	50.1772	50.1772	8.2000e-004	0.0000	50.1977
Total	**0.0276**	**0.3663**	**0.2654**	**1.5800e-003**	**0.0914**	**9.5000e-004**	**0.0924**	**0.0250**	**9.0000e-004**	**0.0258**	**0.0000**	**157.5695**	**157.5695**	**0.0153**	**0.0000**	**157.9531**

3.27 Phase 2-G,A,H (Electric Cranes Only) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1145	1.1593	0.6355	2.1100e-003		0.0493	0.0493		0.0453	0.0453	0.0000	185.5240	185.5240	0.0600	0.0000	187.0240

Total	**0.1145**	**1.1593**	**0.6355**	**2.1100e-003**		**0.0493**	**0.0493**		**0.0453**	**0.0453**	**0.0000**	**185.5240**	**185.5240**	**0.0600**	**0.0000**	**187.0240**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0641	2.5809	0.9903	7.4500e-003	0.1970	3.5800e-003	0.2006	0.0569	3.4200e-003	0.0604	0.0000	778.1039	778.1039	0.1052	0.0000	780.7340
Worker	0.1359	0.0731	0.9331	4.0200e-003	0.4654	3.3600e-003	0.4688	0.1238	3.0900e-003	0.1269	0.0000	363.6303	363.6303	5.9500e-003	0.0000	363.7790
Total	**0.2000**	**2.6540**	**1.9234**	**0.0115**	**0.6625**	**6.9400e-003**	**0.6694**	**0.1808**	**6.5100e-003**	**0.1873**	**0.0000**	**1,141.7342**	**1,141.7342**	**0.1112**	**0.0000**	**1,144.5131**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	2.1100e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**2.1100e-003**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0641	2.5809	0.9903	7.4500e-003	0.1970	3.5800e-003	0.2006	0.0569	3.4200e-003	0.0604	0.0000	778.1039	778.1039	0.1052	0.0000	780.7340
Worker	0.1359	0.0731	0.9331	4.0200e-003	0.4654	3.3600e-003	0.4688	0.1238	3.0900e-003	0.1269	0.0000	363.6303	363.6303	5.9500e-003	0.0000	363.7790
Total	**0.2000**	**2.6540**	**1.9234**	**0.0115**	**0.6625**	**6.9400e-003**	**0.6694**	**0.1808**	**6.5100e-003**	**0.1873**	**0.0000**	**1,141.7342**	**1,141.7342**	**0.1112**	**0.0000**	**1,144.5131**

3.27 Phase 2-G,A,H (Electric Cranes Only) - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1517	1.5360	0.8419	2.8000e-003		0.0653	0.0653		0.0601	0.0601	0.0000	245.7957	245.7957	0.0795	0.0000	247.7831
Total	**0.1517**	**1.5360**	**0.8419**	**2.8000e-003**		**0.0653**	**0.0653**		**0.0601**	**0.0601**	**0.0000**	**245.7957**	**245.7957**	**0.0795**	**0.0000**	**247.7831**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0824	3.3365	1.3238	9.7500e-003	0.2610	4.5200e-003	0.2656	0.0754	4.3300e-003	0.0798	0.0000	1,021.8387	1,021.8387	0.1395	0.0000	1,025.3269
Worker	0.1728	0.0892	1.1616	5.1200e-003	0.6167	4.3400e-003	0.6210	0.1641	3.9900e-003	0.1680	0.0000	463.9596	463.9596	7.2300e-003	0.0000	464.1404
Total	**0.2553**	**3.4257**	**2.4854**	**0.0149**	**0.8777**	**8.8600e-003**	**0.8865**	**0.2395**	**8.3200e-003**	**0.2478**	**0.0000**	**1,485.7984**	**1,485.7984**	**0.1468**	**0.0000**	**1,489.4673**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	2.8000e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**2.8000e-003**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0824	3.3365	1.3238	9.7500e-003	0.2610	4.5200e-003	0.2656	0.0754	4.3300e-003	0.0798	0.0000	1,021.8387	1,021.8387	0.1395	0.0000	1,025.3269
Worker	0.1728	0.0892	1.1616	5.1200e-003	0.6167	4.3400e-003	0.6210	0.1641	3.9900e-003	0.1680	0.0000	463.9596	463.9596	7.2300e-003	0.0000	464.1404
Total	**0.2553**	**3.4257**	**2.4854**	**0.0149**	**0.8777**	**8.8600e-003**	**0.8865**	**0.2395**	**8.3200e-003**	**0.2478**	**0.0000**	**1,485.7984**	**1,485.7984**	**0.1468**	**0.0000**	**1,489.4673**

3.27 Phase 2-G,A,H (Electric Cranes Only) - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0122	0.1236	0.0677	2.3000e-004		5.2500e-003	5.2500e-003		4.8300e-003	4.8300e-003	0.0000	19.7767	19.7767	6.4000e-003	0.0000	19.9366
Total	**0.0122**	**0.1236**	**0.0677**	**2.3000e-004**		**5.2500e-003**	**5.2500e-003**		**4.8300e-003**	**4.8300e-003**	**0.0000**	**19.7767**	**19.7767**	**6.4000e-003**	**0.0000**	**19.9366**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4500e-003	0.2621	0.1074	7.8000e-004	0.0210	3.5000e-004	0.0214	6.0700e-003	3.3000e-004	6.4000e-003	0.0000	81.5212	81.5212	0.0112	0.0000	81.8023
Worker	0.0133	6.6400e-003	0.0882	4.0000e-004	0.0496	3.3000e-004	0.0500	0.0132	3.0000e-004	0.0135	0.0000	36.0757	36.0757	5.4000e-004	0.0000	36.0891
Total	**0.0198**	**0.2687**	**0.1955**	**1.1800e-003**	**0.0706**	**6.8000e-004**	**0.0713**	**0.0193**	**6.3000e-004**	**0.0199**	**0.0000**	**117.5969**	**117.5969**	**0.0118**	**0.0000**	**117.8913**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	2.3000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**2.3000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4500e-003	0.2621	0.1074	7.8000e-004	0.0210	3.5000e-004	0.0214	6.0700e-003	3.3000e-004	6.4000e-003	0.0000	81.5212	81.5212	0.0112	0.0000	81.8023
Worker	0.0133	6.6400e-003	0.0882	4.0000e-004	0.0496	3.3000e-004	0.0500	0.0132	3.0000e-004	0.0135	0.0000	36.0757	36.0757	5.4000e-004	0.0000	36.0891
Total	**0.0198**	**0.2687**	**0.1955**	**1.1800e-003**	**0.0706**	**6.8000e-004**	**0.0713**	**0.0193**	**6.3000e-004**	**0.0199**	**0.0000**	**117.5969**	**117.5969**	**0.0118**	**0.0000**	**117.8913**

3.28 Phase 2-B (Electric Cranes Only) - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0596	0.6033	0.3307	1.1000e-003		0.0256	0.0256		0.0236	0.0236	0.0000	96.5418	96.5418	0.0312	0.0000	97.3224

Total	**0.0596**	**0.6033**	**0.3307**	**1.1000e-003**		**0.0256**	**0.0256**		**0.0236**	**0.0236**	**0.0000**	**96.5418**	**96.5418**	**0.0312**	**0.0000**	**97.3224**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0272	1.0965	0.4207	3.1700e-003	0.0837	1.5200e-003	0.0852	0.0242	1.4500e-003	0.0256	0.0000	330.5670	330.5670	0.0447	0.0000	331.6844
Worker	0.0577	0.0310	0.3963	1.7100e-003	0.1977	1.4300e-003	0.1991	0.0526	1.3100e-003	0.0539	0.0000	154.4517	154.4517	2.5300e-003	0.0000	154.5148
Total	**0.0850**	**1.1275**	**0.8171**	**4.8800e-003**	**0.2814**	**2.9500e-003**	**0.2843**	**0.0768**	**2.7600e-003**	**0.0796**	**0.0000**	**485.0187**	**485.0187**	**0.0472**	**0.0000**	**486.1992**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	1.1000e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**1.1000e-003**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0272	1.0965	0.4207	3.1700e-003	0.0837	1.5200e-003	0.0852	0.0242	1.4500e-003	0.0256	0.0000	330.5670	330.5670	0.0447	0.0000	331.6844
Worker	0.0577	0.0310	0.3963	1.7100e-003	0.1977	1.4300e-003	0.1991	0.0526	1.3100e-003	0.0539	0.0000	154.4517	154.4517	2.5300e-003	0.0000	154.5148
Total	**0.0850**	**1.1275**	**0.8171**	**4.8800e-003**	**0.2814**	**2.9500e-003**	**0.2843**	**0.0768**	**2.7600e-003**	**0.0796**	**0.0000**	**485.0187**	**485.0187**	**0.0472**	**0.0000**	**486.1992**

3.28 Phase 2-B (Electric Cranes Only) - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0260	0.2634	0.1444	4.8000e-004		0.0112	0.0112		0.0103	0.0103	0.0000	42.1452	42.1452	0.0136	0.0000	42.4859
Total	**0.0260**	**0.2634**	**0.1444**	**4.8000e-004**		**0.0112**	**0.0112**		**0.0103**	**0.0103**	**0.0000**	**42.1452**	**42.1452**	**0.0136**	**0.0000**	**42.4859**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0115	0.4671	0.1853	1.3600e-003	0.0365	6.3000e-004	0.0372	0.0106	6.1000e-004	0.0112	0.0000	143.0416	143.0416	0.0195	0.0000	143.5298
Worker	0.0242	0.0125	0.1626	7.2000e-004	0.0863	6.1000e-004	0.0869	0.0230	5.6000e-004	0.0235	0.0000	64.9338	64.9338	1.0100e-003	0.0000	64.9591
Total	**0.0357**	**0.4795**	**0.3479**	**2.0800e-003**	**0.1228**	**1.2400e-003**	**0.1241**	**0.0335**	**1.1700e-003**	**0.0347**	**0.0000**	**207.9753**	**207.9753**	**0.0205**	**0.0000**	**208.4889**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	4.8000e-004		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**4.8000e-004**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0115	0.4671	0.1853	1.3600e-003	0.0365	6.3000e-004	0.0372	0.0106	6.1000e-004	0.0112	0.0000	143.0416	143.0416	0.0195	0.0000	143.5298
Worker	0.0242	0.0125	0.1626	7.2000e-004	0.0863	6.1000e-004	0.0869	0.0230	5.6000e-004	0.0235	0.0000	64.9338	64.9338	1.0100e-003	0.0000	64.9591
Total	**0.0357**	**0.4795**	**0.3479**	**2.0800e-003**	**0.1228**	**1.2400e-003**	**0.1241**	**0.0335**	**1.1700e-003**	**0.0347**	**0.0000**	**207.9753**	**207.9753**	**0.0205**	**0.0000**	**208.4889**

3.29 Phase 2-B Architectural Coatings - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0145	0.0974	0.1539	2.5000e-004		4.3800e-003	4.3800e-003		4.3800e-003	4.3800e-003	0.0000	21.7197	21.7197	1.1800e-003	0.0000	21.7493
Total	**0.0573**	**0.0974**	**0.1539**	**2.5000e-004**		**4.3800e-003**	**4.3800e-003**		**4.3800e-003**	**4.3800e-003**	**0.0000**	**21.7197**	**21.7197**	**1.1800e-003**	**0.0000**	**21.7493**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	1.5200e-003	8.5000e-004	1.0000e-005	2.5000e-004	0.0000	2.5000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.5994	0.5994	1.2000e-004	0.0000	0.6025
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0193	0.0104	0.1328	5.7000e-004	0.0662	4.8000e-004	0.0667	0.0176	4.4000e-004	0.0181	0.0000	51.7452	51.7452	8.5000e-004	0.0000	51.7664
Total	**0.0194**	**0.0119**	**0.1336**	**5.8000e-004**	**0.0665**	**4.8000e-004**	**0.0670**	**0.0177**	**4.4000e-004**	**0.0181**	**0.0000**	**52.3447**	**52.3447**	**9.7000e-004**	**0.0000**	**52.3689**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0428					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6300e-003	0.0902	0.1559	2.5000e-004		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	21.7197	21.7197	1.1800e-003	0.0000	21.7493
Total	**0.0474**	**0.0902**	**0.1559**	**2.5000e-004**		**3.4000e-004**	**3.4000e-004**		**3.4000e-004**	**3.4000e-004**	**0.0000**	**21.7197**	**21.7197**	**1.1800e-003**	**0.0000**	**21.7493**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	1.5200e-003	8.5000e-004	1.0000e-005	2.5000e-004	0.0000	2.5000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.5994	0.5994	1.2000e-004	0.0000	0.6025
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0193	0.0104	0.1328	5.7000e-004	0.0662	4.8000e-004	0.0667	0.0176	4.4000e-004	0.0181	0.0000	51.7452	51.7452	8.5000e-004	0.0000	51.7664
Total	**0.0194**	**0.0119**	**0.1336**	**5.8000e-004**	**0.0665**	**4.8000e-004**	**0.0670**	**0.0177**	**4.4000e-004**	**0.0181**	**0.0000**	**52.3447**	**52.3447**	**9.7000e-004**	**0.0000**	**52.3689**

3.29 Phase 2-B Architectural Coatings - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0558					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	0.0189	0.1270	0.2005	3.3000e-004		5.7100e-003	5.7100e-003		5.7100e-003	5.7100e-003	0.0000	28.3014	28.3014	1.5400e-003	0.0000	28.3400
Total	**0.0747**	**0.1270**	**0.2005**	**3.3000e-004**		**5.7100e-003**	**5.7100e-003**		**5.7100e-003**	**5.7100e-003**	**0.0000**	**28.3014**	**28.3014**	**1.5400e-003**	**0.0000**	**28.3400**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.8900e-003	1.1400e-003	1.0000e-005	2.5000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.7721	0.7721	1.6000e-004	0.0000	0.7761
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0242	0.0125	0.1626	7.2000e-004	0.0863	6.1000e-004	0.0869	0.0230	5.6000e-004	0.0235	0.0000	64.9338	64.9338	1.0100e-003	0.0000	64.9591
Total	**0.0242**	**0.0144**	**0.1637**	**7.3000e-004**	**0.0866**	**6.1000e-004**	**0.0872**	**0.0230**	**5.6000e-004**	**0.0236**	**0.0000**	**65.7059**	**65.7059**	**1.1700e-003**	**0.0000**	**65.7352**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0558					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0400e-003	0.1175	0.2031	3.3000e-004		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	28.3014	28.3014	1.5400e-003	0.0000	28.3400
Total	**0.0618**	**0.1175**	**0.2031**	**3.3000e-004**		**4.4000e-004**	**4.4000e-004**		**4.4000e-004**	**4.4000e-004**	**0.0000**	**28.3014**	**28.3014**	**1.5400e-003**	**0.0000**	**28.3400**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.8900e-003	1.1400e-003	1.0000e-005	2.5000e-004	0.0000	2.6000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.7721	0.7721	1.6000e-004	0.0000	0.7761
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0242	0.0125	0.1626	7.2000e-004	0.0863	6.1000e-004	0.0869	0.0230	5.6000e-004	0.0235	0.0000	64.9338	64.9338	1.0100e-003	0.0000	64.9591
Total	**0.0242**	**0.0144**	**0.1637**	**7.3000e-004**	**0.0866**	**6.1000e-004**	**0.0872**	**0.0230**	**5.6000e-004**	**0.0236**	**0.0000**	**65.7059**	**65.7059**	**1.1700e-003**	**0.0000**	**65.7352**

3.30 Phase 2-G,A,H Architectural Coatings - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2989					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0741	0.4965	0.7842	1.2900e-003		0.0223	0.0223		0.0223	0.0223	0.0000	110.6706	110.6706	6.0400e-003	0.0000	110.8215
Total	**0.3730**	**0.4965**	**0.7842**	**1.2900e-003**		**0.0223**	**0.0223**		**0.0223**	**0.0223**	**0.0000**	**110.6706**	**110.6706**	**6.0400e-003**	**0.0000**	**110.8215**

Unmitigated Construction Off-Site

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

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1159	0.0598	0.7788	3.4300e-003	0.4135	2.9100e-003	0.4164	0.1100	2.6700e-003	0.1127	0.0000	311.0840	311.0840	4.8500e-003	0.0000	311.2053
Total	**0.1159**	**0.0598**	**0.7788**	**3.4300e-003**	**0.4135**	**2.9100e-003**	**0.4164**	**0.1100**	**2.6700e-003**	**0.1127**	**0.0000**	**311.0840**	**311.0840**	**4.8500e-003**	**0.0000**	**311.2053**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2989					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0236	0.4594	0.7943	1.2900e-003		1.7200e-003	1.7200e-003		1.7200e-003	1.7200e-003	0.0000	110.6704	110.6704	6.0400e-003	0.0000	110.8213
Total	**0.3225**	**0.4594**	**0.7943**	**1.2900e-003**		**1.7200e-003**	**1.7200e-003**		**1.7200e-003**	**1.7200e-003**	**0.0000**	**110.6704**	**110.6704**	**6.0400e-003**	**0.0000**	**110.8213**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1159	0.0598	0.7788	3.4300e-003	0.4135	2.9100e-003	0.4164	0.1100	2.6700e-003	0.1127	0.0000	311.0840	311.0840	4.8500e-003	0.0000	311.2053
Total	**0.1159**	**0.0598**	**0.7788**	**3.4300e-003**	**0.4135**	**2.9100e-003**	**0.4164**	**0.1100**	**2.6700e-003**	**0.1127**	**0.0000**	**311.0840**	**311.0840**	**4.8500e-003**	**0.0000**	**311.2053**

3.30 Phase 2-G,A,H Architectural Coatings - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0359					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.8900e-003	0.0596	0.0941	1.5000e-004		2.6800e-003	2.6800e-003		2.6800e-003	2.6800e-003	0.0000	13.2805	13.2805	7.2000e-004	0.0000	13.2986
Total	**0.0448**	**0.0596**	**0.0941**	**1.5000e-004**		**2.6800e-003**	**2.6800e-003**		**2.6800e-003**	**2.6800e-003**	**0.0000**	**13.2805**	**13.2805**	**7.2000e-004**	**0.0000**	**13.2986**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0133	6.6400e-003	0.0882	4.0000e-004	0.0496	3.3000e-004	0.0500	0.0132	3.0000e-004	0.0135	0.0000	36.0757	36.0757	5.4000e-004	0.0000	36.0891
Total	**0.0133**	**6.6400e-003**	**0.0882**	**4.0000e-004**	**0.0496**	**3.3000e-004**	**0.0500**	**0.0132**	**3.0000e-004**	**0.0135**	**0.0000**	**36.0757**	**36.0757**	**5.4000e-004**	**0.0000**	**36.0891**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0359					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8300e-003	0.0551	0.0953	1.5000e-004		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	13.2805	13.2805	7.2000e-004	0.0000	13.2986
Total	**0.0387**	**0.0551**	**0.0953**	**1.5000e-004**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**	**0.0000**	**13.2805**	**13.2805**	**7.2000e-004**	**0.0000**	**13.2986**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0133	6.6400e-003	0.0882	4.0000e-004	0.0496	3.3000e-004	0.0500	0.0132	3.0000e-004	0.0135	0.0000	36.0757	36.0757	5.4000e-004	0.0000	36.0891
Total	**0.0133**	**6.6400e-003**	**0.0882**	**4.0000e-004**	**0.0496**	**3.3000e-004**	**0.0500**	**0.0132**	**3.0000e-004**	**0.0135**	**0.0000**	**36.0757**	**36.0757**	**5.4000e-004**	**0.0000**	**36.0891**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

Category	tons/yr										MT/yr					
Mitigated	2.3407	9.0818	25.9230	0.0982	9.1355	0.1040	9.2394	2.4602	0.0972	2.5574	0.0000	9,044.4321	9,044.4321	0.3740	0.0000	9,053.7809
Unmitigated	2.3407	9.0818	25.9230	0.0982	9.1355	0.1040	9.2394	2.4602	0.0972	2.5574	0.0000	9,044.4321	9,044.4321	0.3740	0.0000	9,053.7809

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	10,307.50	9,904.50	9083.00	23,269,294	23,269,294
City Park	7.56	91.00	66.96	59,703	59,703
Day-Care Center	740.60	62.10	58.30	643,221	643,221
Enclosed Parking with Elevator	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Strip Mall	332.40	315.30	153.23	468,726	468,726
Total	11,388.06	10,372.90	9,361.49	24,440,943	24,440,943

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Day-Care Center	9.50	7.30	7.30	12.70	82.30	5.00	28	58	14
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.604697	0.038136	0.192426	0.089922	0.013708	0.005077	0.031210	0.009257	0.004288	0.003553	0.006262	0.000945	0.000519
City Park	0.604697	0.038136	0.192426	0.089922	0.013708	0.005077	0.031210	0.009257	0.004288	0.003553	0.006262	0.000945	0.000519
Day-Care Center	0.604697	0.038136	0.192426	0.089922	0.013708	0.005077	0.031210	0.009257	0.004288	0.003553	0.006262	0.000945	0.000519
Enclosed Parking with Elevator	0.604697	0.038136	0.192426	0.089922	0.013708	0.005077	0.031210	0.009257	0.004288	0.003553	0.006262	0.000945	0.000519
Other Asphalt Surfaces	0.604697	0.038136	0.192426	0.089922	0.013708	0.005077	0.031210	0.009257	0.004288	0.003553	0.006262	0.000945	0.000519

Strip Mall	0.604697	0.038136	0.192426	0.089922	0.013708	0.005077	0.031210	0.009257	0.004288	0.003553	0.006262	0.000945	0.000519

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,333.3265	2,333.3265	0.1055	0.0218	2,342.4692
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,333.3265	2,333.3265	0.1055	0.0218	2,342.4692
NaturalGas Mitigated	0.0740	0.6333	0.2735	4.0400e-003		0.0512	0.0512		0.0512	0.0512	0.0000	732.7580	732.7580	0.0140	0.0134	737.1124
NaturalGas Unmitigated	0.0740	0.6333	0.2735	4.0400e-003		0.0512	0.0512		0.0512	0.0512	0.0000	732.7580	732.7580	0.0140	0.0134	737.1124

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.35322e+007	0.0730	0.6235	0.2653	3.9800e-003		0.0504	0.0504		0.0504	0.0504	0.0000	722.1279	722.1279	0.0138	0.0132	726.4192
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	164700	8.9000e-004	8.0700e-003	6.7800e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7890	8.7890	1.7000e-004	1.6000e-004	8.8413

Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	34500	1.9000e-004	1.6900e-003	1.4200e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	1.8411	1.8411	4.0000e-005	3.0000e-005	1.8520
Total		**0.0741**	**0.6333**	**0.2735**	**4.0400e-003**		**0.0512**	**0.0512**		**0.0512**	**0.0512**	**0.0000**	**732.7580**	**732.7580**	**0.0141**	**0.0134**	**737.1124**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.35322e+007	0.0730	0.6235	0.2653	3.9800e-003		0.0504	0.0504		0.0504	0.0504	0.0000	722.1279	722.1279	0.0138	0.0132	726.4192
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Day-Care Center	164700	8.9000e-004	8.0700e-003	6.7800e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7890	8.7890	1.7000e-004	1.6000e-004	8.8413
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	34500	1.9000e-004	1.6900e-003	1.4200e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	1.8411	1.8411	4.0000e-005	3.0000e-005	1.8520
Total		**0.0741**	**0.6333**	**0.2735**	**4.0400e-003**		**0.0512**	**0.0512**		**0.0512**	**0.0512**	**0.0000**	**732.7580**	**732.7580**	**0.0141**	**0.0134**	**737.1124**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			

Apartments Mid Rise	6.54408e+006	1,903.7492	0.0861	0.0178	1,911.2087
City Park	0	0.0000	0.0000	0.0000	0.0000
Day-Care Center	44400	12.9165	5.8000e-004	1.2000e-004	12.9671
Enclosed Parking with Elevator	1.35366e+006	393.7952	0.0178	3.6800e-003	395.3382
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	78600	22.8656	1.0300e-003	2.1000e-004	22.9552
Total		**2,333.3266**	**0.1055**	**0.0218**	**2,342.4692**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	6.54408e+006	1,903.7492	0.0861	0.0178	1,911.2087
City Park	0	0.0000	0.0000	0.0000	0.0000
Day-Care Center	44400	12.9165	5.8000e-004	1.2000e-004	12.9671
Enclosed Parking with Elevator	1.35366e+006	393.7952	0.0178	3.6800e-003	395.3382
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	78600	22.8656	1.0300e-003	2.1000e-004	22.9552
Total		**2,333.3266**	**0.1055**	**0.0218**	**2,342.4692**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	11.3564	0.2149	16.4349	0.0104		0.7679	0.7679		0.7679	0.7679	70.6640	47.8368	118.5009	0.1316	4.6300e-003	123.1728
Unmitigated	11.3564	0.2149	16.4349	0.0104		0.7679	0.7679		0.7679	0.7679	70.6640	47.8368	118.5009	0.1316	4.6300e-003	123.1728

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.1354					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.2981					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.5763	0.0823	4.9246	9.8000e-003		0.7041	0.7041		0.7041	0.7041	70.6640	29.0251	99.6892	0.1136	4.6300e-003	103.9094
Landscaping	0.3465	0.1326	11.5103	6.1000e-004		0.0638	0.0638		0.0638	0.0638	0.0000	18.8117	18.8117	0.0181	0.0000	19.2634
Total	**11.3564**	**0.2149**	**16.4349**	**0.0104**		**0.7679**	**0.7679**		**0.7679**	**0.7679**	**70.6640**	**47.8368**	**118.5009**	**0.1316**	**4.6300e-003**	**123.1728**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.1354					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.2981					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	3.5763	0.0823	4.9246	9.8000e-003		0.7041	0.7041		0.7041	0.7041	70.6640	29.0251	99.6892	0.1136	4.6300e-003	103.9094
Landscaping	0.3465	0.1326	11.5103	6.1000e-004		0.0638	0.0638		0.0638	0.0638	0.0000	18.8117	18.8117	0.0181	0.0000	19.2634
Total	**11.3564**	**0.2149**	**16.4349**	**0.0104**		**0.7679**	**0.7679**		**0.7679**	**0.7679**	**70.6640**	**47.8368**	**118.5009**	**0.1316**	**4.6300e-003**	**123.1728**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	264.0168	3.3333	0.0806	371.3751
Unmitigated	264.0168	3.3333	0.0806	371.3751

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e

Land Use	Mgal	MT/yr			
Apartments Mid Rise	100.989 / 63.6668	255.8326	3.3008	0.0798	362.1324
City Park	0 / 4.76593	4.8526	2.2000e-004	5.0000e-005	4.8716
Day-Care Center	0.428896 / 1.10287	1.9341	0.0141	3.5000e-004	2.3889
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.555544 / 0.340495	1.3974	0.0182	4.4000e-004	1.9822
Total		**264.0168**	**3.3333**	**0.0806**	**371.3751**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	100.989 / 63.6668	255.8326	3.3008	0.0798	362.1324
City Park	0 / 4.76593	4.8526	2.2000e-004	5.0000e-005	4.8716
Day-Care Center	0.428896 / 1.10287	1.9341	0.0141	3.5000e-004	2.3889
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.555544 / 0.340495	1.3974	0.0182	4.4000e-004	1.9822
Total		**264.0168**	**3.3333**	**0.0806**	**371.3751**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	149.0400	8.8080	0.0000	369.2404
Unmitigated	149.0400	8.8080	0.0000	369.2404

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	713	144.7326	8.5535	0.0000	358.5688
City Park	0.34	0.0690	4.0800e-003	0.0000	0.1710
Day-Care Center	13	2.6389	0.1560	0.0000	6.5377
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	7.88	1.5996	0.0945	0.0000	3.9629
Total		**149.0400**	**8.8080**	**0.0000**	**369.2404**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	713	144.7326	8.5535	0.0000	358.5688
City Park	0.34	0.0690	4.0800e-003	0.0000	0.1710
Day-Care Center	13	2.6389	0.1560	0.0000	6.5377
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	7.88	1.5996	0.0945	0.0000	3.9629
Total		**149.0400**	**8.8080**	**0.0000**	**369.2404**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

ATTACHMENT F
San Francisco Local Recycling and Composting Ordinances

Print

San Francisco Environment Code

CHAPTER 14: CONSTRUCTION AND DEMOLITION DEBRIS RECOVERY ORDINANCE*

Sec. 1400. Findings.
Sec. 1401. Definitions.
Sec. 1402. Requirements.
Sec. 1403. Reserved.
Sec. 1404. Registration Requirement for Facilities and Transporters.
Sec. 1405. Registration Criteria.
Sec. 1406. General Terms and Conditions for Registered Facilities and Transporters.
Sec. 1407. Trade Secrets.
Sec. 1408. Reserved.
Sec. 1409. List of Registered Facilities and Registered Transporters.
Sec. 1410. Enforcement.
Sec. 1411. Reports.
Sec. 1412. Forms, Regulations and Guidelines.
Sec. 1413. Cost of Implementation.
Sec. 1414. Reserved.
Sec. 1415. Disclaimer of Liability.
Sec. 1416. Duties are Discretionary.
Sec. 1417. Severability.

***Editor's Note**:

Ordinance 27-06, File No. 051142, Approved February 16, 2006, from which Chapter 14 of this Code derives, shall take effect on July 1, 2006.

SEC. 1400. FINDINGS.

The Board of Supervisors finds and declares the following:

A. People who live in, work in or visit San Francisco generate 1.8 million tons of solid waste annually with more than half of these materials recovered through waste prevention, recycling and composting.

B. The State of California through its California Integrated Waste Management Act of 1989, Assembly Bill 939 (AB 939), requires that each local jurisdiction in the state divert 50% of discarded materials (base year 1990) from landfill. Every city and county in California, including the City, could face fines up to $10,000 a day for not meeting the above mandated goal.

C. The Source Reduction and Recycling Element (SRRE) for San Francisco adopted by the Board of Supervisors in 1992, recognized the importance of recovering wood, metals, and inerts from construction and demolition activities in order to meet the state mandated waste reduction goal.

D. The Board of Supervisors adopted Resolution No. 679-02 setting a goal of 75% diversion from landfill by 2010 and promoting the highest and best use of recovered materials and authorizing the Commission on the Environment to adopt a zero waste goal, which it set as 2020.

E. The Green Building Ordinance, Chapter 7 of the Environment Code, establishes LEED™ Silver level as the standard for all City building projects, which can include the goal of diverting 75% of construction and demolition debris from landfill for each project.

F. There are facilities both within the City and in nearby surrounding areas that can effectively reuse, recycle or otherwise recover the constituent elements of the materials generated by construction and demolition activity and thereby divert such materials from landfill.

G. Construction and demolition waste recovery programs reduce the amount of materials generated and hauled to landfill, decrease worker exposure to hazards, improve worker safety, reduce truck trips and traffic and improve air quality, thereby enhancing the health, safety and welfare of San Franciscans.

H. This Chapter requires construction and demolition debris to be transported by a registered vehicle and processed by a registered facility in order to ensure proper handling and to recover an additional estimated 100,000 tons from landfill disposal annually.

I. State law requires the California Integrated Waste Management Board to adopt a model construction and demolition debris ordinance and requires that Board to take into account a city's efforts to encourage or require recovery of construction and demolition debris in determining whether a city has met the mandated 50% recovery rate and other solid waste reduction and recycling requirements. This Chapter would help the City maintain the levels required by the state mandate and achieve the City's goals of 75% landfill diversion by 2010 and zero waste by 2020.

J. In keeping with the Precautionary Principle, codified in Chapter 1 of the Environment Code, this Chapter requires proper handling of construction debris as a deterrent to unsafe and wasteful practices. In this way, the City will create and maintain a healthy, viable environment for current and future generations, and will become a model of sustainability.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1401. DEFINITIONS.

For the purposes of this Chapter, the following words have the following meanings:

(a) "Alternative Daily Cover" or "ADC" shall mean materials, other than soil, that have been approved by the California Integrated Waste Management Board or a successor agency for use as an overlay on an exposed landfill face.

(b) "Bio-mass Conversion" shall mean the controlled combustion, when separated from other solid waste and used for producing electricity or heat, of wood, woodchips, woodwaste, tree and brush prunings. Bio-mass conversion does not include the controlled combustion of recyclable pulp or recyclable paper materials, sludge, medical or hazardous waste.

(c) "Construction and Demolition Debris" shall mean building materials and solid waste generated from construction and demolition activities, including, but not limited to, fully-cured asphalt, concrete, brick, rock, soil, lumber, gypsum wallboard, cardboard and other associated packaging, roofing material, ceramic tile, carpeting, fixtures, plastic pipe, metals, tree stumps, and other vegetative matter resulting from land clearing and landscaping for construction, deconstruction, demolition or land developments. This term does not include; refuse regulated under the 1932 Refuse Collection and Disposal Initiative Ordinance or sections of the Municipal Code that implement the provisions of that ordinance; materials excavated from the public right-ofway; or, unless otherwise specified in Section 1402(b), materials source separated for reuse or recycling. Hazardous waste, as defined in California Health and Safety Code section 25100 et seq., as amended, is not Construction and Demolition Debris for purposes of this Chapter.

(d) "Department" shall mean the San Francisco Department of the Environment.

(e) "Director" shall mean the Director of the Department of the Environment or his or her designee.

(f) "Facility" shall mean a facility that receives and processes construction and demolition debris into its component material types for reuse, recycling, and disposal of residuals.

(g) "Person" shall mean a natural person, a firm, joint stock company, business concern, association, partnership or corporation or governmental entity, including the City and County of San Francisco and its departments, boards and commissions for projects within the geographic boundaries of the City, and its or their successors or assigns.

(h) "Recover" or "Recovery" shall mean any activity, including source reduction, deconstruction and salvaging, reuse, recycling and composting, which causes materials to be recovered for use as a resource and diverted from disposal.

(i) "Registered Transporter" or "Registered Facility" shall mean a person who holds a valid registration issued by the Director pursuant to this Chapter.

(j) "Transport" or "Transportation" shall mean transportation of construction and demolition debris, "Transport" or "Transportation" does not include transportation of less than one cubic yard of construction and demolition debris or transportation in a vehicle that has no more than two axles and no more than two tires per axle.

(k) "Transporter" shall mean a person that transports construction and demolition debris as defined in this Chapter. "Transporter" does not include a person that owns the property at which the construction and demolition debris was generated.

(l) "Vehicle" shall mean a vehicle used to transport construction and demolition debris as those terms are defined in this Chapter.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1402. REQUIREMENTS.

(a) Except as provided in this Chapter, no person, other than the owner of the property where the construction and demolition debris was generated, may transport and no person may process construction and demolition debris unless that person has a registration from the Department as provided in this Chapter. Except as provided in this Chapter, all construction and demolition debris, regardless of transport or volume, must be processed at a registered facility.

(b) A person conducting full demolition of an existing structure must submit a waste diversion plan to the Director which provides for a minimum of 65% diversion from landfill of construction and demolition debris, including materials source separated for reuse or recycling which would otherwise not be subject to this Chapter. The plan may propose to use facilities and transporters that are not registered under this Chapter. The waste diversion plan must be submitted to the Director at the time the person applies for a demolition permit from the Department of Building Inspection and must include the following information: a list of all material types and volumes anticipated from the demolition; the market or destination for each material; the estimated recovery rate (diversion from landfill) by material or market; and the anticipated transporter for each material type. The Director shall make a determination as to the adequacy of the plan within five (5) business days and shall notify the Department of Building Inspection of its decision.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1403. RESERVED.

SEC. 1404. REGISTRATION REQUIREMENT FOR FACILITIES AND TRANSPORTERS.

(a) A person subject to Section 1402 shall apply for a registration by filing with the Director an application form prescribed by the Director, which contains the following information, and the information set forth in Section 1405.

(i) For construction and demolition debris processing facilities: the name and address of the person who owns the facility; the name and address of the person who operates the facility; a statement that the owner or operator has all permits, authorizations or licenses required by any local, state or federal agency to operate the facility and all necessary insurance.

(ii) For transporters of construction and demolition debris: the name and address of the person who owns the vehicle(s); a statement that the vehicle(s) and each operator has all permits, authorizations or licenses and any insurance required by any local, state or federal agency to operate the vehicle(s). An owner of a vehicle may obtain a single registration covering all vehicles and all debris boxes or other containers, provided that each vehicle is clearly and prominently marked as belonging to that owner (with the name of the business entity). The owner of the vehicle(s) is responsible for compliance by any operator of a vehicle owned by that person being used to transport construction and demolition debris.

(b) The person who owns the facility or the vehicle(s) must certify the accuracy of the information submitted in the application form under penalty of perjury.

(c) The Director must act on an application form within 15 days of receipt.

(d) If the Director determines that the information required by the application form is not complete, the Director will provide written notice to the potential registrant of the remaining information needed.

(e) If the Director determines that the application form is complete, the Director shall issue a registration containing the following minimum information: a reference to the general terms and conditions specified in Section 1406; the name and address of the registrant, the name and address of the facility (if applicable); the effective and expiration date of the registration; and a registration number assigned by the Director.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1405. REGISTRATION CRITERIA.

The owner of the facility or the transporter shall include the following information in the application form described in Section 1404.

(a) **For Facilities.**

(i) The facility meets an overall minimum recovery rate of 65 percent for construction and demolition debris (based on the most recent month), which may include materials used as ADC or bio-mass conversion, provided that the facility can demonstrate that the use as ADC or bio-mass conversion is the highest and best use. The recovery rate will be determined by the total quantity of materials delivered to established recycling and composting markets divided by the total quantity received by the registered facility. Highest and best use for ADC does not include ADC which is generated by intentional crushing or grinding of construction and demolition debris that has not been processed to remove wood, metal, wallboard, glass and other materials for which markets or uses other than ADC are available. Consistent with this section, the Director shall adopt regulations pursuant to Section 1412 to specify how the recovery rate will be calculated and when ADC or bio-mass conversion is considered to be the highest and best use of a particular material.

(ii) The facility has and is implementing a hazardous waste load checking program to minimize hazardous waste accepted at the facility.

(iii) The facility has no outstanding notices of violation from any federal, state or local agency that could affect the permits, authorizations or licenses required for its continued operation.

(iv) The facility agrees to submit annual reports to the Director on forms and by dates specified by the Director pursuant to Section 1412. The reports must include, with respect to San Francisco materials only, the following information; the total quantity of material received at the registered facility, the breakdown of all of the specific recycled commodities, the end use of the recycled commodity (reuse, recycling, composting, ADC, bio-mass conversion) landfill destination for residuals, and the recovery ratio for the report period by processing area.

(v) For each truckload received at a discrete facility processing area, the facility agrees to provide each vehicle with a uniquely numbered receipt specifying, at a minimum, the facility name and processing area, the quantity of material received and the current recovery rate for that processing area. The receipt will also include the identity of the transporter and the permit application number issued by the Department of Building Inspections, if any, associated with that load.

(vi) The facility agrees to comply with the provisions of this Chapter; provide documentation to support the information in the application form, including the Section 1404(b) certification, to the Director upon request; and allow the Director to make inspections of the facility in order to verify the information in the application form and required reports.

(b) **For Transporters.**

(i) The owner has no outstanding notices of violation from any federal, state or local agency that could affect the permits, authorizations or licenses required for continued operation of his or her vehicles.

(ii) The owner agrees to submit to the Director, upon request, the receipts specified in subsection (a)(v).

(iii) The owner agrees that for each truckload of materials delivered to a facility, the operator of the vehicle will provide to the facility the permit application number, if any, associated with that load.

(iv) The owner of the vehicle agrees to comply with the provisions of this Chapter; provide documentation to support the information in the application form, including the Section 1404(b) certification, to the Director upon request; and allow the Director to make inspections of vehicles in order to verify the information in the application form and reports.

(v) The owner agrees that all vehicles will operate in accordance with state and federal laws and motor carrier regulations and in accordance with best business practices to ensure against leakage and unsafe loads. All Construction and Demolition Debris must be transported in either a fully enclosed vehicle or container and must be covered to minimize any potential spillage or littering.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1406. GENERAL TERMS AND CONDITIONS FOR REGISTERED FACILITIES AND TRANSPORTERS.

The following terms and conditions shall apply to each registration:

(a) A registration is valid for two years.

(b) Each registrant must submit a registration renewal on a form specified by the Director thirty (30) days prior to the expiration date of the registration. Except as provided in this subsection, if a registrant submits a properly completed renewal form thirty (30) days prior to the expiration date, the current registration will continue in full force and effect until the Director issues a registration or all administrative and judicial appeals have been exhausted or the time for appeal has expired. A person may not renew a

registration during a period of suspension, either by filing a renewal form or by operation of law. At the end of the suspension period, the person may apply for a registration.

(c) All records required to be kept by registered facilities and transporters shall be kept for at least three (3) years.

(d) A registration is not transferable.

(e) A registration does not take the place of any license required by state, federal or local law nor does compliance with the requirements of this Chapter relieve any party of compliance with any other applicable State, federal or local law.

(f) A copy of proof of registration shall be prominently displayed at any registered facility and kept in a registered vehicle.

(g) Within thirty (30) days of a change of any of the information required on a registration or renewal form, a registrant must file an amendment to the registration on a form prescribed by the Director.

(h) Each registrant must notify the Director, in writing, within twenty-four (24) hours of the time a permit, authorization or license required by any local, state or federal agency to operate the facility or vehicle terminates, expires or is revoked or suspended.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1407. TRADE SECRETS.

(a) If a person believes that any information required to be reported or disclosed by this Chapter contains a trade secret, the person shall provide the information to the Director and shall notify the Director in writing of that belief, detailing the basis of the belief as to each specific item of information the person claims is a trade secret. For purposes of this Chapter, "trade secret" shall have the same meaning as it has under state law. The person designating information as a trade secret shall specify a name and street address for notification purposes and shall be responsible for updating such information. The Director shall not disclose any properly substantiated trade secret which is so designated by a person except as required by this Chapter or as otherwise required by law.

(b) Information designated as trade secret may be disclosed to an officer or employee of the City and County of San Francisco, the State of California, or the United States of America for use in connection with the official duties of such officer or employee acting under authority of law for the protection of health, without liability on the part of the City.

(c) When the Director or other City official or employee receives a request for information that has been designated as, or which the City determines may be, a trade secret, the City shall notify the person or business of the request. The City may request further evidence or explanation from the person as to why the information requested is a trade secret. If the City determines that the information does not constitute a trade secret, the City shall notify the person or business of that conclusion and that the information will be released by a specified date in order to provide the person or business the opportunity to obtain a court order prohibiting disclosure.

(d) In adopting this Chapter, the Board of Supervisors does not intend to authorize or require the disclosure to the public of any trade secrets protected under the laws of the State of California.

(e) This Section is not intended to empower a person or business to refuse to disclose any information, including but not limited to trade secrets, to the Director or other City Departments required under this Chapter.

(f) Notwithstanding any other provision of this Chapter, any officer or employee of the City and County of San Francisco, or former officer or employee or contractor with the City or employee thereof, who by virtue of such employment of official position has obtained possession or has had access to information, the

disclosure of which is prohibited by this Section, and who, knowing that disclosure of the information is prohibited, knowingly and willfully discloses the information in any manner to any person or business not entitled to receive it, shall be guilty of a misdemeanor.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1408. RESERVED.

SEC. 1409. LIST OF REGISTERED FACILITIES AND REGISTERED TRANSPORTERS.

The Director will maintain a current list of registered facilities and registered transporters available at the Department's Office and on its website. The Director will update the list at least every sixty (60) days. The Director will work with the Department of Building Inspection and other City departments to ensure availability of this information to the public.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1410. ENFORCEMENT.

(a) The Director has authority to administer all provisions of this Chapter and to enforce its provisions by any lawful means available for such purpose. The Department of Building Inspection shall work together with the Director to coordinate enforcement of this Chapter with enforcement of relevant provisions of the Building Code.

(b) In order to carry out the provisions of this Chapter, the Director has the authority to inspect any registered facility or registered transporter. This right of entry will be exercised only at reasonable hours, and with the consent of the owner of the vehicle or facility or with a proper inspection warrant. The Director will inspect each registered facility and transporter at least once annually.

(c) **Suspension of registration.** Whenever the Director finds that information in a person's application, registration or any required report is inaccurate, a person does not have the appropriate permits, authorizations or licenses to operate the registered facility or vehicle, or that a person is violating or has violated this Chapter or the terms of a registration, the Director may issue an order suspending the registration as provided in this Section. The Director's order to suspend must include a written statement of the reasons for the suspension and must provide the person with an opportunity to respond in writing before the order becomes effective. The order shall provide the effective date and end date of the suspension. The suspension period will be no more than: one (1) month for the first violation; six (6) months for the second; and twelve months (12) for any subsequent violations. The Director's decision shall be final.

(d) A final decision of the Director to suspend a registration may be appealed to the Board of Appeals in the manner prescribed in Article 1 of the San Francisco Business and Tax Regulations Code. Any person who fails to appeal the Director's decision to the Board of Appeals within the time specified may not challenge a decision or final order of the Director in any judicial proceedings brought to enforce the decision or order or for other remedies. Within ninety (90) days of the decision of the Board of Appeals, a person may file with a Court of competent jurisdiction a petition for writ of mandate to review the Board of Appeals decision, provided that the responsible party has exhausted its administrative remedies. Any person who fails to file a petition within this 90-day period may not challenge a decision or final order of the Board of Appeals in any judicial proceedings brought to enforce the decision or order or for other remedies. Section 1094.5 of the California Code of Civil Procedure shall govern any proceedings conducted pursuant to this Section. In all proceedings pursuant to this Section, the Court shall affirm the Board of Appeal's decision if it is based upon substantial evidence in the whole record. This Section does not prohibit the Court from granting any appropriate relief within its jurisdiction.

(e) The Director may request the City Attorney or the District Attorney, as the case may be, to commence an action to enforce this Chapter.

(i) **Civil Penalties.** Any person who violates this Chapter shall be civilly liable to the City and County of San Francisco for a civil penalty in an amount not to exceed one-thousand dollars ($1,000) for each day in which the violation occurs. Each day that such violation continues shall constitute a separate violation. For a second violation of the Chapter, the civil penalty will be not less than one thousand dollars ($1,000) and not more than five thousand dollars ($5,000) for each day in which the violation occurs. In determining civil penalties, the court shall consider the extent of harm caused by the violation(s), the nature and persistence of the violation(s), the length of time over which the violation(s) occur(s), the frequency of past violations, any action taken to mitigate the violation, and the financial burden to the violator.

(ii) **Criminal Penalties.** Each violation shall be considered a separate misdemeanor punishable by a fine not exceeding than one thousand dollars ($1,000), or imprisonment not to exceed six (6) months in the County Jail, or both. In determining criminal penalties, the court shall consider the extent of harm caused by the violation(s), the nature and persistence of the violation(s), the length of time over which the violation(s) occur(s), the frequency of past violations, any action taken to mitigate the violation, the financial burden to the violator, and such other factors as deemed relevant and material.

(f) Remedies under this Section are in addition to and do not supersede or limit any and all other remedies, civil or criminal.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1411. REPORTS.

Within two (2) years of the effective date of this Chapter, the Director shall report to the Commission on the Environment on the results of this ordinance, including the quantity recovered from landfill, and any recommended amendments of the ordinance.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1412. FORMS, REGULATIONS AND GUIDELINES.

(a) Consistent with the intent of this Chapter, and after consultation with other City departments, public notice and a public meeting, the Director may adopt forms, regulations, and guidelines as directed by this Chapter and as necessary and appropriate to implement this Chapter.

(b) The Department shall provide assistance and consulting to persons subject to this Chapter regarding compliance with this Chapter.

(c) The Director, consistent with this Chapter, may waive any specific requirement of this Chapter if the person seeking the waiver has demonstrated that strict application of the specific requirement would create practical difficulties not generally applicable to other persons in similar circumstances. The Director shall specify in writing the basis for any waiver under this Section.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1413. COST OF IMPLEMENTATION.

The Director shall determine the cost of implementing this Chapter. The Director may request that relevant City departments provide work orders to the Director to cover the cost of implementing and maintaining the program required by this Chapter.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1414. RESERVED.

SEC. 1415. DISCLAIMER OF LIABILITY.

The degree of protection required by this Chapter is considered to be reasonable for regulatory purposes. The standards set forth in this Chapter are minimal standards and do not imply that compliance will ensure proper handling of construction and demolition debris. This Chapter shall not create liability on the part of the City, or any of its officers or employees for any damages that result from reliance on this Article or any administrative decision lawfully made in accordance with this Chapter. All persons handling construction and demolition debris within the City should be and are advised to conduct their own inquiry as to the handling of such materials. In undertaking the implementation of this Chapter, the City is assuming an undertaking only to promote the general welfare. It is not assuming, nor is it imposing on its officer and employees, an obligation for breach of which it is liable in money damages to any person who claims that such breach proximately caused injury.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1416. DUTIES ARE DISCRETIONARY.

Subject to the limitations of due process and applicable requirements of State or federal laws, and notwithstanding any other provisions of this Code whenever the words "shall" or "must" are used in establishing a responsibility or duty of the City, its elected or appointed officers, employees or agents, it is the legislative intent that such words establish a discretionary responsibility or duty requiring the exercise of judgement and discretion.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1417. SEVERABILITY.

If any section, subsection, sentence, clause, or phrase of this Chapter is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of the Chapter. The Board of Supervisors hereby declares that it would have passed this Chapter and each and every section, subsection, sentence, clause, or phrase not declared invalid or unconstitutional without regard to whether any portion of this Chapter would be subsequently declared invalid or unconstitutional.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

Print

San Francisco Environment Code

CHAPTER 19: MANDATORY RECYCLING AND COMPOSTING

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SEC. 1901. TITLE.

This Chapter shall be entitled "Mandatory Recycling and Composting".

(Added by Ord. 10009, File No. 081404, App. 6/23/2009)

SEC. 1902. DEFINITIONS.

New Ordinance Notice

Publisher's Note: This section has been **AMENDED** by new legislation (Ord. 300-18 , approved 12/21/2018, effective 1/21/2019). The text of the amendment will be incorporated under the new section number when the amending legislation is effective.

For the purposes of this Chapter, the following words have the following meanings:

(a) "Adequate Refuse Collection Service" means that a dwelling or commercial property is serviced by a Collector for recyclables, compostables, and trash, and that the level of service is sufficient to contain the refuse generated at that dwelling or commercial property.

(b) "City" means the City and County of San Francisco.

(c) "Collection" means taking physical possession of and removing discarded material from the place of generation for subsequent off-site management of that material.

(d) "Collection Container" means the receptacle that is provided, designated and serviced by the collector for the collection of recyclables, compostables or trash.

(e) "Collector" means a person, firm or corporation licensed and permitted to collect refuse by the Director of Public Health pursuant to the provisions of the Refuse Collection and Disposal Ordinance adopted November 8, 1932, as amended, and any other collectors of discarded material not excluded under that ordinance.

(f) "Commercial Property" means a parcel or any portion of real property where refuse is generated that is not a dwelling, including schools, institutions, and City properties.

(g) "Compostable" means any material that can be broken down into, or otherwise become part of, usable compost (e.g., soil-conditioning material) in a safe and timely manner as accepted in San Francisco's compostables collection program, such as food scraps, soiled paper and plant trimmings. Compostable materials can also include disposable plastic food service ware and bags if labeled "Compostable", in accordance with the Food Service Waste Reduction Ordinance (No. 295-06) and Department of the Environment regulations for easy identification, meeting the ASTM Standard Specification (D6400) for compostable plastics, and consistent with State labeling law (California Public Resources Code Section 42359) that any plastic bag or food container labeled "Compostable" must meet the ASTM Standard Specification for compostable plastics.

(h) "Construction and Demolition Debris" means building materials generated from construction and demolition activities including, but not limited to, fully-cured asphalt, concrete, brick, rock, soil, lumber, gypsum wallboard, cardboard and other associated packaging, roofing material, ceramic tile, carpeting, fixtures, plastic pipe, metals, tree stumps, and other vegetative matter resulting from land clearing and landscaping for construction, deconstruction, demolition or land developments. Hazardous waste, as defined in California Health and Safety Code Sections 25100 et seq., is not construction and demolition debris for purposes of this Chapter.

(i) "Customer" means any person being served food from a food vendor or event.

(j) "Department" means the San Francisco Department of the Environment.

(k) "Designated" means clearly labeled and color-coded for a material type, such as labeled blue receptacles for recyclables, green for compostables and black for trash.

(l) "Director" means the Director of the Department of the Environment or his or her designee.

(m) "Disposable Food Service Ware" means all containers, bowls, plates, trays, carton, cups, lids, straws, forks, spoons, knives, napkins and other items that are designed for one-time use for serving food.

(n) "Dwelling" means a residence, flat, apartment, or other facility, used for housing one or more persons.

(o) "Event" means any function that serves food and is permitted through any agency, including, but not limited to, the Department of Parking and Traffic, the Recreation and Park Department, the Port of San Francisco or, to the extent permitted by law, the National Park Service.

(p) "Food Vendor" means any and all sales outlets, stores, shops, vehicles or other places of business located or operating in the city that operate primarily to sell or convey foods or beverages to consumers, and stores that sell food or beverages in combination with a gasoline station.

(q) "Janitor" means the person who is hired by owners and managers of commercial properties and their contractors to process refuse on-site before it leaves the premises.

(r) "Manager" means the authorized agent for the owner of a building, structure or property, who is responsible for the day-to-day operation of said building, structure or property.

(s) "Multifamily Property" means a property that includes multiple residential households and has a single account with collector(s) for recyclables, compostables and trash.

(t) "Person" means a natural person (including a resident, employee, or visitor), a firm, business concern, association, partnership, corporation or governmental entity, including the City and County of San Francisco and its departments, boards and commissions, and successors or assigns.

(u) "Public Trash Container" means any receptacle installed by a public agency at a sidewalk, park or other public area and that is not under the control, unless otherwise required by this Chapter, of a multifamily or commercial property, food vendor or event manager.

(v) "Recyclable" means any material that can be sorted and reconstituted, for the purpose of using the altered form in the manufacture of a new product, as accepted in San Francisco's recycling collection program, such as paper, bottles and cans. Recycling does not include burning, incinerating, converting, or otherwise thermally destroying solid waste.

(w) "Refuse" has the meaning set forth in the Refuse Collection and Disposal Ordinance adopted November 8, 1932, as amended, and includes recyclables, compostables, and trash, but not construction and demolition debris or hazardous waste, all as defined in this Chapter.

(x) "Source Separate" means to divide refuse at the place of discard generation, prior to collection, into separate containers that are designated for recyclables, compostables or trash.

(y) "Transfer Station" means a facility that is permitted under Health Code Section 294 to receive discarded materials and transport them to a landfill for disposal.

(z) "Trash" means material that is designated for landfill disposal by the collector and does not include either recyclable or compostable materials. The term "trash" does not include hazardous waste, as defined in California Health and Safety Code Sections 25100 et seq., or construction and demolition debris as defined in this Chapter.

(Added by Ord. 100-09, File No. 081404, App. 6/23/2009)

SEC. 1903. SOURCE SEPARATION OF REFUSE REQUIRED.

All persons in San Francisco must source separate their refuse into recyclables, compostables and trash, and place each type of refuse in a separate container designated for disposal of that type of refuse. No person may mix recyclables, compostables or trash, or deposit refuse of one type in a collection container designated for another type of refuse, except as otherwise provided in this Chapter.

(Added by Ord. 100-09, File No. 081404, App. 6/23/2009)

SEC. 1904. REQUIREMENTS FOR OWNERS OR MANAGERS OF MULTIFAMILY AND COMMERCIAL PROPERTIES.

(a) Owners or managers of multifamily or commercial properties must provide Adequate Refuse Collection Service to the tenants, employees, contractors, and customers of the properties.

(b) Owners or managers of multifamily or commercial properties must supply appropriate containers, placed in an appropriate location, to make source separation of refuse convenient for the tenants, employees, contractors, and customers of the properties. The containers must:

(1) Be of appropriate number and size in light of the recyclable, compostable, and trash quantities reasonably anticipated to be generated at the location;

(2) Bear appropriate signage and be color coded to identify the type of refuse to be contained—blue for recyclables, green for compostables, and black for trash—and meet any additional design criteria

established by the Department by regulation; and,

(3) Be placed as close together as possible, to provide equally convenient access to users.

(c) Owners or managers of multifamily or commercial properties must provide information and/or training for new tenants, employees and contractors, including janitors on how to source separate recyclables, compostables and trash, and must re-educate existing tenants, employees and contractors at least once a year.

(d) Owners and managers of commercial properties or their contractors will work with on-site janitors to create effective source separation programs as a means of achieving compliance, meeting citywide diversion goals, and achieving the diversion or disposal rate reported annually to the State of California.

(e) New construction or expansion of multifamily or commercial properties may be subject to Department of Building Inspection requirements, such as Administrative Bulletin 088 and Building Code Chapter 13, Section 1304C, to provide adequate space for recyclables and compostables, which includes requiring any chute systems to keep compostables, recyclables and trash separate.

(Added by Ord. 100-09, File No. 081404, App. 6/23/2009)

SEC. 1905. REQUIREMENTS FOR OWNERS OR MANAGERS OF FOOD VENDORS AND EVENTS.

(a) Owners or managers of food vendors and events must provide Adequate Refuse Collection Service to their employees, contractors and customers.

(b) Owners or managers of food vendors and events must supply appropriate containers, placed in appropriate locations, to make source separation of recyclables, compostables, and trash convenient for the employees, contractors, and customers of the food vendors and events. The containers must:

(1) Be of appropriate number and size in light of the recyclable, compostable, and trash quantities reasonably anticipated to be generated at the location;

(2) Bear appropriate signage and be color coded to identify the type of refuse to be deposited—blue for recyclables, green for compostables, and black for trash—and meet any additional design criteria established by the Department by regulation; and,

(3) Be placed as close together as possible to provide equally convenient access to users.

(c) Owners or managers of food vendors and events must provide information and/or training for new tenants, employees, and contractors, including janitors on how to source separate recyclables, compostables, and trash, and must re-educate existing tenants, employees, and contractors at least once a year.

(d) Food vendors that provide disposable food ware must have at least one container each for recyclables, compostables and trash for use by customers and visitors, placed inside near a main exit, unless that food vendor does not use disposable food ware for on-site consumption and serves minimal to go orders per day, but not including any to go orders delivered to residents by a delivery service. Food vendors meeting the requirements of this Section are exempt from the requirement of Public Works Code Section 173 to place "a litter receptacle outside each exit." Multiple food vendors that provide disposable food service ware and share a common eating area may share an appropriate number, size, and placement of containers for recyclables, compostables and trash for convenient use by customers or visitors.

(e) Food vendors and events must not put any fats, oils or grease in trash collection containers.

(Added by Ord. 100-09, File No. 081404, App. 6/23/2009)

SEC. 1906. REQUIREMENTS FOR REFUSE COLLECTORS, TRANSFER STATIONS, AND PROCESSING FACILITIES.

New Ordinance Notice

Publisher's Note: This section has been **AMENDED** by new legislation (Ord. 300-18 , approved 12/21/2018, effective 1/21/2019, operative in part 7/1/19 and 7/1/21). The text of the amendment will be incorporated under the new section number when the amending legislation is effective.

(a) All collectors must appropriately designate the collection containers they provide to customers for source separation of recyclables, compostables and trash. The containers must:

(1) Bear appropriate signage that allows users to clearly and easily identify which containers to use for recyclables, compostables or trash;

(2) Be color-coded—blue for recyclables, green for compostables and black for trash; and,

(3) Bear the name of the collector to whom the container belongs.

(b) (1) If a collector finds materials that are not the correct type as designated for that container, such as recyclables or compostables in a trash container, or trash in a compostables or recyclables container, the collector then must leave a tag on the container identifying the incorrect materials.

(2) If the collector continues to find incorrect materials in a collection container after the collector has left a previous tag for that customer and that type of container, the collector must leave another tag on the container identifying the incorrect materials and send a written notice to the person who subscribes for that collection service.

(3) If the collector continues to find incorrect materials in a collection container after the collector has already left two or more tags for that customer and that type of container, the collector may refuse to empty the container, subject to California Code of Regulations Title 14, Section 17331, or as determined by the Director of Public Health or his or her designee. If the container is not emptied, the collector must leave a tag and send a written notice to the person who subscribers for the collection service, identifying the incorrect materials and describing what action must be taken for the materials to be collected; provided, however, that a collector may not refuse on this basis to empty containers from multifamily or commercial properties with multiple tenants and joint account collection service.

(4) The collector shall, upon request, provide to the Director a list of the names and addresses of those persons who have received tags or notices or whose containers have not been emptied due to non-compliance with this Chapter, or copies of the tags or notices issued by the collector. The collector shall also provide to the Director, upon request, a list of the names, addresses, and service levels of the collector's customers and any additional information required by the Director.

(c) Within 90 days of the end of each calendar year, each collector must submit to the Department, on a form specified by the Director, an annual report of all tons collected by material type and to whom the material was sent.

(d) No person may deliver recyclables or compostables, including those mixed with trash, to a landfill or transfer station for the purpose of having those materials landfilled, except as follows:

(1) A collector may drop off recyclables or compostables at the San Francisco transfer station for landfill if the transfer station has agreed to provide to the Director, upon request, audits of collection vehicles for a specified period going forward in time. The transfer station's audit shall report the quantity of recyclables or compostables, stated as estimated tons per load or as a percentage of the loads, deposited at

the transfer station by collection vehicles specifically identified in the request over a reasonable period of time occurring after the request.

(2) A processing facility that sorts and reconstitutes recyclables for the purpose of using the altered form in the manufacture of a new product or turns compostables into usable and marketable compost (e.g., soil-conditioning) material may send to a landfill a minor portion of those materials that constitutes unmarketable processing residuals, if the processing facility provides to the Director, upon request, audits of specific collection vehicles for a specific period going forward in time, of the quantities of recyclables or compostables sent to the landfill from the processing facility.

(e) No person may deliver trash from the city, including trash mixed with recyclables or compostables, to a processing facility, unless the processing facility has agreed to provide to the Director, upon request, audits of collection vehicles for a specified period going forward in time. The processing facility's audit shall report the quantity of trash, stated as estimated tons per load or as a percentage of the loads, deposited at the processing facility by collection vehicles specifically identified in the request over a reasonable period of time occurring after the request.

(Added by Ord. 100-09, File No. 081404, App. 6/23/2009)

SEC. 1907. REQUIREMENT TO SUBSCRIBE TO REFUSE COLLECTION SERVICE.

Owners of residential, multifamily or commercial properties, events or other facilities that generate refuse must subscribe to and pay for Adequate Refuse Collection Service, and provide an accessible location for sufficient levels of service with collector(s) for source separated recyclables, compostables and trash, except as otherwise provided in this Chapter. Owners of such properties are responsible for any failure to subscribe to or pay for sufficient levels of refuse collection service. The Director of Public Health, pursuant to Health Code Article 6, as amended, shall enforce requirements for adequate and continuous refuse collections services.

(Added by Ord. 100-09, File No. 081404, App. 6/23/2009)

SEC. 1908. ENFORCEMENT.

New Ordinance Notice

Publisher's Note: This section has been **AMENDED** by new legislation (Ord. 300-18 , approved 12/21/2018, effective 1/21/2019). The text of the amendment will be incorporated under the new section number when the amending legislation is effective.

(a) The Director and his or her designee may administer all provisions of this Chapter and enforce those provisions by any lawful means available for such purpose, except as otherwise provided in this Chapter.

(b) To the extent permitted by law, the Director may inspect any collection container, collection vehicle load, or receiving facility for collected trash, recyclables or compostables.

(c) Except as otherwise provided in this Chapter, the Director of the Department of Public Health or his or her designee may impose administrative fines for violations of those provisions of this Chapter, or of rules and regulations adopted pursuant to this Chapter, that pertain to the jurisdiction of the Department of Public Health.

(d) Except as otherwise provided in this Chapter, the Director of Public Works or his or her designee may impose administrative fines for violations of those provisions of this Chapter, or of any rule or

regulation adopted pursuant to this Chapter, that pertain to the jurisdiction of the Department of Public Works.

(e) San Francisco Administrative Code Chapter 100, "Procedures Governing the Imposition of Administrative Fines," as amended, is hereby incorporated in its entirety and shall govern the imposition, enforcement, collection, and review of administrative citations issued to enforce this Chapter and any rule or regulation adopted pursuant to this Chapter; provided, however, that:

(1) The Director of Public Works or the Director of Public Health may adopt regulations providing for lesser penalty amounts than those provided in Administrative Code Section 100.5;

(2) The fine for any violation at a dwelling or commercial property that generates less than one cubic yard of refuse per week may not initially exceed $100; and,

(3) No person who is the owner, tenant, manager, employee, contractor, or visitor of a multifamily or of a multi-tenant commercial property shall be subject to fines or penalties for violation of Section 1903 (but will remain subject to such enforcement for violations of section 1904 and other sections of the Ordinance), unless and until the Director of the Department of the Environment has adopted specific regulations setting out the liability of such persons. The Director shall not adopt such regulations prior to July 1, 2011.

(f) The City shall use administrative penalties collected under this Chapter, including recovery of enforcement costs, to fund implementation and enforcement of this Chapter. Remedies under this Chapter are in addition to and do not supersede or limit any and all other remedies, civil or criminal.

(Added by Ord. 100-09, File No. 081404, App. 6/23/2009)

SEC. 1909. FORMS, REGULATIONS AND GUIDELINES.

New Ordinance Notice

Publisher's Note: This section has been **AMENDED** by new legislation (Ord. 300-18 , approved 12/21/2018, effective 1/21/2019). The text of the amendment will be incorporated under the new section number when the amending legislation is effective.

(a) After public notice and a public hearing, the Director may adopt necessary forms, regulations, and guidelines to implement this Chapter.

(b) The Department shall provide assistance regarding compliance with this Chapter.

(c) The Department shall provide information on its website regarding what materials are accepted as recyclables, compostables, and trash under this Chapter.

(Added by Ord. 100-09, File No. 081404, App. 6/23/2009)

SEC. 1910. EXCEPTIONS

New Ordinance Notice

Publisher's Note: This section has been **AMENDED** by new legislation (Ord. 300-18 , approved 12/21/2018, effective 1/21/2019). The text of the amendment will be incorporated under the new section number when the amending legislation is effective.

(a) A property owner or manager may seek a waiver from the Director of all or portions of this Chapter, if the applicant submits documentation, using a form specified by the Director and including a signed affidavit under penalty of perjury, that shows that the property does not have adequate storage space for containers for recyclables, compostables or trash. In cases where after on-site verification space limitations are determined to exist, the Director shall evaluate the feasibility of sharing containers for recyclables, compostables or trash with contiguous properties, and, where feasible, requiring container sharing in lieu of providing a waiver.

(b) Except as otherwise required by the Director, a collector may drop-off compostables or recyclables at the San Francisco transfer station that have been collected from public trash containers. The Director may require public trash containers to have a recyclables receptacle attached.

(Added by Ord. 100-09, File No. 081404, App. 6/23/2009)

SEC. 1911. DISCLAIMER OF LIABILITY.

The degree of protection required by this Chapter is considered to be reasonable for regulatory purposes. The standards set forth in this Chapter are minimal standards and do not imply that compliance will ensure safe handling of recyclables, compostables or trash. This Chapter shall not create liability on the part of the City, or any of its officers or employees for any damages that result from reliance on this Chapter or any administrative decision lawfully made in accordance with this Chapter. All persons handling discarded materials within the City should be and are advised to conduct their own inquiry as to the handling of such materials. In undertaking the implementation of this Chapter, the City is assuming an undertaking only to promote the general welfare. It is not assuming, nor is it imposing on its officer and employees, an obligation for breach of which it is liable in money damages to any person who claims that such breach proximately caused injury.

(Added by Ord. 100-09, File No. 081404, App. 6/23/2009)

SEC. 1912. DUTIES ARE DISCRETIONARY.

Subject to the limitations of due process and applicable requirements of State or Federal laws, and notwithstanding any other provisions of this Code, whenever the words "shall" or "must" are used in establishing a responsibility or duty of the City, its elected or appointed officers, employees or agents, it is the legislative intent that such words establish a discretionary responsibility or duty requiring the exercise of judgment and discretion.

(Added by Ord. 100-09, File No. 081404, App. 6/23/2009)

San Francisco Ordinance No. 27-06 which took effect on July 1, 2006 enacted a new Chapter of the Environment Code and made amendments to the Building Code, the Health Code and the Police Code in order to establish a comprehensive program to effectuate the City's goals. The text of each code is included below.

- **ENVIRONMENT CODE:**
  - Created Chapter 14 entitled "Construction and Demolition Debris Recovery Ordinance" [see page 1, below]

- **BUILDING CODE**:
  - Amended Section 106.3.2.2 [see page 12, below]
  - Amended the title of Chapter 13 from "Energy Conservation to "Resource Conservation" [The text of this Chapter is not included below since only the title was amended]
  - Added Chapter 13B entitled "Construction and Demolition Debris Recovery Program" [see page 13, below]

- **HEALTH CODE**:
  - Added Section 288 [see page 14, below]
  - Added Section 288.1 [see page 15, below]

- **POLICE CODE**:
  - Amended Section 39-1 [see page 15, below]

* * * * *

ENVIRONMENT CODE

CHAPTER 14: CONSTRUCTION AND DEMOLITION DEBRIS RECOVERY ORDINANCE*

Sec. 1400. Findings.

Sec. 1401. Definitions.

Sec. 1402. Requirements.

Sec. 1403. Reserved.

Sec. 1404. Registration Requirement for Facilities and Transporters.

Sec. 1405. Registration Criteria.

Sec. 1406. General Terms and Conditions for Registered Facilities and Transporters.

Sec. 1407. Trade Secrets.

Sec. 1408. Reserved.

Sec. 1409. List of Registered Facilities and Registered Transporters.

Sec. 1410. Enforcement.

Sec. 1411. Reports.

Sec. 1412. Forms, Regulations and Guidelines.

Sec. 1413. Cost of Implementation.

Sec. 1414. Reserved.

Sec. 1415. Disclaimer of Liability.

Sec. 1416. Duties are Discretionary.

Sec. 1417. Severability.

Editor's note: *; Ordinance 27-06, File No. 051142, Approved February 16, 2006, from which Chapter 14 of this Code derives, shall take effect on July 1, 2006.

SEC. 1400. FINDINGS.

The Board of Supervisors finds and declares the following:

A. People who live in, work in or visit San Francisco generate 1.8 million tons of solid waste annually with more than half of these materials recovered through waste prevention, recycling and composting.

B. The State of California through its California Integrated Waste Management Act of 1989, Assembly Bill 939 (AB 939), requires that each local jurisdiction in the state divert 50% of discarded materials (base year 1990) from landfill. Every city and county in California, including the City, could face fines up to $10,000 a day for not meeting the above mandated goal.

C. The Source Reduction and Recycling Element (SRRE) for San Francisco adopted by the Board of Supervisors in 1992, recognized the importance of recovering wood, metals, and inerts from construction and demolition activities in order to meet the state mandated waste reduction goal.

D. The Board of Supervisors adopted Resolution No. 679-02 setting a goal of 75% diversion from landfill by 2010 and promoting the highest and best use of recovered materials and authorizing the Commission on the Environment to adopt a zero waste goal, which it set as 2020.

E. The Green Building Ordinance, Chapter 7 of the Environment Code, establishes LEEDTM Silver level as the standard for all City building projects, which can include the goal of diverting 75% of construction and demolition debris from landfill for each project.

F. There are facilities both within the City and in nearby surrounding areas that can effectively reuse, recycle or otherwise recover the constituent elements of the materials generated by construction and demolition activity and thereby divert such materials from landfill.

G. Construction and demolition waste recovery programs reduce the amount of materials generated and hauled to landfill, decrease worker exposure to hazards, improve worker safety, reduce truck trips and traffic and improve air quality, thereby enhancing the health, safety and welfare of San Franciscans.

H. This Chapter requires construction and demolition debris to be transported by a registered vehicle and processed by a registered facility in order to ensure proper handling and to recover an additional estimated 100,000 tons from landfill disposal annually.

I. State law requires the California Integrated Waste Management Board to adopt a model construction and demolition debris ordinance and requires that Board to take into account a city's efforts to encourage or require recovery of construction and demolition debris in determining whether a city has met the mandated 50% recovery rate and other solid waste reduction and recycling requirements. This Chapter would help the City maintain the levels required by the state mandate and achieve the City's goals of 75% landfill diversion by 2010 and zero waste by 2020.

J. In keeping with the Precautionary Principle, codified in Chapter 1 of the Environment Code, this Chapter requires proper handling of construction debris as a deterrent to unsafe and wasteful practices. In this way, the City will create and maintain a healthy, viable environment for current and future generations, and will become a model of sustainability.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1401. DEFINITIONS.

For the purposes of this Chapter, the following words have the following meanings:

(a) "Alternative Daily Cover" or "ADC" shall mean materials, other than soil, that have been approved by the California Integrated Waste Management Board or a successor agency for use as an overlay on an exposed landfill face.

(b) "Bio-mass Conversion" shall mean the controlled combustion, when separated from other solid waste and used for producing electricity or heat, of wood, woodchips, woodwaste, tree and brush prunings. Bio-mass conversion does not include the controlled combustion of recyclable pulp or recyclable paper materials, sludge, medical or hazardous waste.

(c) "Construction and Demolition Debris" shall mean building materials and solid waste generated from construction and demolition activities, including, but not limited to, fully-cured asphalt, concrete, brick, rock, soil, lumber, gypsum wallboard, cardboard and other associated packaging, roofing

material, ceramic tile, carpeting, fixtures, plastic pipe, metals, tree stumps, and other vegetative matter resulting from land clearing and landscaping for construction, deconstruction, demolition or land developments. This term does not include; refuse regulated under the 1932 Refuse Collection and Disposal Initiative Ordinance or sections of the Municipal Code that implement the provisions of that ordinance; materials excavated from the public right-of-way; or, unless otherwise specified in Section 1402(b), materials source separated for reuse or recycling. Hazardous waste, as defined in California Health and Safety Code section 25100 et seq., as amended, is not Construction and Demolition Debris for purposes of this Chapter.

(d) "Department" shall mean the San Francisco Department of the Environment.

(e) "Director" shall mean the Director of the Department of the Environment or his or her designee.

(f) "Facility" shall mean a facility that receives and processes construction and demolition debris into its component material types for reuse, recycling, and disposal of residuals.

(g) "Person" shall mean a natural person, a firm, joint stock company, business concern, association, partnership or corporation or governmental entity, including the City and County of San Francisco and its departments, boards and commissions for projects within the geographic boundaries of the City, and its or their successors or assigns.

(h) "Recover" or "Recovery" shall mean any activity, including source reduction, deconstruction and salvaging, reuse, recycling and composting, which causes materials to be recovered for use as a resource and diverted from disposal.

(i) "Registered Transporter" or "Registered Facility" shall mean a person who holds a valid registration issued by the Director pursuant to this Chapter.

(j) "Transport" or "Transportation" shall mean transportation of construction and demolition debris, "Transport" or "Transportation" does not include transportation of less than one cubic yard of construction and demolition debris or transportation in a vehicle that has no more than two axles and no more than two tires per axle.

(k) "Transporter" shall mean a person that transports construction and demolition debris as defined in this Chapter. "Transporter" does not include a person that owns the property at which the construction and demolition debris was generated.

(l) "Vehicle" shall mean a vehicle used to transport construction and demolition debris as those terms are defined in this Chapter.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1402. REQUIREMENTS.

(a) Except as provided in this Chapter, no person, other than the owner of the property where the construction and demolition debris was generated, may transport and no person may process

construction and demolition debris unless that person has a registration from the Department as provided in this Chapter. Except as provided in this Chapter, all construction and demolition debris, regardless of transport or volume, must be processed at a registered facility.

(b) A person conducting full demolition of an existing structure must submit a waste diversion plan to the Director which provides for a minimum of 65% diversion from landfill of construction and demolition debris, including materials source separated for reuse or recycling which would otherwise not be subject to this Chapter. The plan may propose to use facilities and transporters that are not registered under this Chapter. The waste diversion plan must be submitted to the Director at the time the person applies for a demolition permit from the Department of Building Inspection and must include the following information: a list of all material types and volumes anticipated from the demolition; the market or destination for each material; the estimated recovery rate (diversion from landfill) by material or market; and the anticipated transporter for each material type. The Director shall make a determination as to the adequacy of the plan within five (5) business days and shall notify the Department of Building Inspection of its decision.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1403. RESERVED.

SEC. 1404. REGISTRATION REQUIREMENT FOR FACILITIES AND TRANSPORTERS.

(a) A person subject to Section 1402 shall apply for a registration by filing with the Director an application form prescribed by the Director, which contains the following information, and the information set forth in Section 1405.

(i) For construction and demolition debris processing facilities: the name and address of the person who owns the facility; the name and address of the person who operates the facility; a statement that the owner or operator has all permits, authorizations or licenses required by any local, state or federal agency to operate the facility and all necessary insurance.

(ii) For transporters of construction and demolition debris: the name and address of the person who owns the vehicle(s); a statement that the vehicle(s) and each operator has all permits, authorizations or licenses and any insurance required by any local, state or federal agency to operate the vehicle(s). An owner of a vehicle may obtain a single registration covering all vehicles and all debris boxes or other containers, provided that each vehicle is clearly and prominently marked as belonging to that owner (with the name of the business entity). The owner of the vehicle(s) is responsible for compliance by any operator of a vehicle owned by that person being used to transport construction and demolition debris.

(b) The person who owns the facility or the vehicle(s) must certify the accuracy of the information submitted in the application form under penalty of perjury.

(c) The Director must act on an application form within 15 days of receipt.

(d) If the Director determines that the information required by the application form is not complete, the Director will provide written notice to the potential registrant of the remaining information needed.

(e) If the Director determines that the application form is complete, the Director shall issue a registration containing the following minimum information: a reference to the general terms and conditions specified in Section 1406; the name and address of the registrant, the name and address of the facility (if applicable); the effective and expiration date of the registration; and a registration number assigned by the Director.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1405. REGISTRATION CRITERIA.

The owner of the facility or the transporter shall include the following information in the application form described in Section 1404.

(a) **For Facilities**.

(i) The facility meets an overall minimum recovery rate of 65 percent for construction and demolition debris (based on the most recent month), which may include materials used as ADC or bio-mass conversion, provided that the facility can demonstrate that the use as ADC or bio-mass conversion is the highest and best use. The recovery rate will be determined by the total quantity of materials delivered to established recycling and composting markets divided by the total quantity received by the registered facility. Highest and best use for ADC does not include ADC which is generated by intentional crushing or grinding of construction and demolition debris that has not been processed to remove wood, metal, wallboard, glass and other materials for which markets or uses other than ADC are available. Consistent with this section, the Director shall adopt regulations pursuant to Section 1412 to specify how the recovery rate will be calculated and when ADC or bio-mass conversion is considered to be the highest and best use of a particular material.

(ii) The facility has and is implementing a hazardous waste load checking program to minimize hazardous waste accepted at the facility.

(iii) The facility has no outstanding notices of violation from any federal, state or local agency that could affect the permits, authorizations or licenses required for its continued operation.

(iv) The facility agrees to submit annual reports to the Director on forms and by dates specified by the Director pursuant to Section 1412. The reports must include, with respect to San Francisco materials only, the following information; the total quantity of material received at the registered facility, the breakdown of all of the specific recycled commodities, the end use of the recycled commodity (reuse, recycling, composting, ADC, bio-mass conversion) landfill destination for residuals, and the recovery ratio for the report period by processing area.

(v) For each truckload received at a discrete facility processing area, the facility agrees to provide each vehicle with a uniquely numbered receipt specifying, at a minimum, the facility name and processing area, the quantity of material received and the current recovery rate for that processing area. The

receipt will also include the identity of the transporter and the permit application number issued by the Department of Building Inspections, if any, associated with that load.

(vi) The facility agrees to comply with the provisions of this Chapter; provide documentation to support the information in the application form, including the Section 1404(b) certification, to the Director upon request; and allow the Director to make inspections of the facility in order to verify the information in the application form and required reports.

(b) **For Transporters**.

(i) The owner has no outstanding notices of violation from any federal, state or local agency that could affect the permits, authorizations or licenses required for continued operation of his or her vehicles.

(ii) The owner agrees to submit to the Director, upon request, the receipts specified in subsection (a)(v).

(iii) The owner agrees that for each truckload of materials delivered to a facility, the operator of the vehicle will provide to the facility the permit application number, if any, associated with that load.

(iv) The owner of the vehicle agrees to comply with the provisions of this Chapter; provide documentation to support the information in the application form, including the Section 1404(b) certification, to the Director upon request; and allow the Director to make inspections of vehicles in order to verify the information in the application form and reports.

(v) The owner agrees that all vehicles will operate in accordance with state and federal laws and motor carrier regulations and in accordance with best business practices to ensure against leakage and unsafe loads. All Construction and Demolition Debris must be transported in either a fully enclosed vehicle or container and must be covered to minimize any potential spillage or littering.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1406. GENERAL TERMS AND CONDITIONS FOR REGISTERED FACILITIES AND TRANSPORTERS.

The following terms and conditions shall apply to each registration:

(a) A registration is valid for two years.

(b) Each registrant must submit a registration renewal on a form specified by the Director thirty (30) days prior to the expiration date of the registration. Except as provided in this subsection, if a registrant submits a properly completed renewal form thirty (30) days prior to the expiration date, the current registration will continue in full force and effect until the Director issues a registration or all administrative and judicial appeals have been exhausted or the time for appeal has expired. A person may not renew a registration during a period of suspension, either by filing a renewal form or by operation of law. At the end of the suspension period, the person may apply for a registration.

(c) All records required to be kept by registered facilities and transporters shall be kept for at least three (3) years.

(d) A registration is not transferable.

(e) A registration does not take the place of any license required by state, federal or local law nor does compliance with the requirements of this Chapter relieve any party of compliance with any other applicable State, federal or local law.

(f) A copy of proof of registration shall be prominently displayed at any registered facility and kept in a registered vehicle.

(g) Within thirty (30) days of a change of any of the information required on a registration or renewal form, a registrant must file an amendment to the registration on a form prescribed by the Director.

(h) Each registrant must notify the Director, in writing, within twenty-four (24) hours of the time a permit, authorization or license required by any local, state or federal agency to operate the facility or vehicle terminates, expires or is revoked or suspended.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1407. TRADE SECRETS.

(a) If a person believes that any information required to be reported or disclosed by this Chapter contains a trade secret, the person shall provide the information to the Director and shall notify the Director in writing of that belief, detailing the basis of the belief as to each specific item of information the person claims is a trade secret. For purposes of this Chapter, "trade secret" shall have the same meaning as it has under state law. The person designating information as a trade secret shall specify a name and street address for notification purposes and shall be responsible for updating such information. The Director shall not disclose any properly substantiated trade secret which is so designated by a person except as required by this Chapter or as otherwise required by law.

(b) Information designated as trade secret may be disclosed to an officer or employee of the City and County of San Francisco, the State of California, or the United States of America for use in connection with the official duties of such officer or employee acting under authority of law for the protection of health, without liability on the part of the City.

(c) When the Director or other City official or employee receives a request for information that has been designated as, or which the City determines may be, a trade secret, the City shall notify the person or business of the request. The City may request further evidence or explanation from the person as to why the information requested is a trade secret. If the City determines that the information does not constitute a trade secret, the City shall notify the person or business of that conclusion and that the information will be released by a specified date in order to provide the person or business the opportunity to obtain a court order prohibiting disclosure.

(d) In adopting this Chapter, the Board of Supervisors does not intend to authorize or require the disclosure to the public of any trade secrets protected under the laws of the State of California.

(e) This Section is not intended to empower a person or business to refuse to disclose any information, including but not limited to trade secrets, to the Director or other City Departments required under this Chapter.

(f) Notwithstanding any other provision of this Chapter, any officer or employee of the City and County of San Francisco, or former officer or employee or contractor with the City or employee thereof, who by virtue of such employment of official position has obtained possession or has had access to information, the disclosure of which is prohibited by this Section, and who, knowing that disclosure of the information is prohibited, knowingly and willfully discloses the information in any manner to any person or business not entitled to receive it, shall be guilty of a misdemeanor.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1408. RESERVED.

SEC. 1409. LIST OF REGISTERED FACILITIES AND REGISTERED TRANSPORTERS.

The Director will maintain a current list of registered facilities and registered transporters available at the Department's Office and on its website. The Director will update the list at least every sixty (60) days. The Director will work with the Department of Building Inspection and other City departments to ensure availability of this information to the public.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1410. ENFORCEMENT.

(a) The Director has authority to administer all provisions of this Chapter and to enforce its provisions by any lawful means available for such purpose. The Department of Building Inspection shall work together with the Director to coordinate enforcement of this Chapter with enforcement of relevant provisions of the Building Code.

(b) In order to carry out the provisions of this Chapter, the Director has the authority to inspect any registered facility or registered transporter. This right of entry will be exercised only at reasonable hours, and with the consent of the owner of the vehicle or facility or with a proper inspection warrant. The Director will inspect each registered facility and transporter at least once annually.

(c) **Suspension of registration**. Whenever the Director finds that information in a person's application, registration or any required report is inaccurate, a person does not have the appropriate permits, authorizations or licenses to operate the registered facility or vehicle, or that a person is violating or has violated this Chapter or the terms of a registration, the Director may issue an order suspending the registration as provided in this Section. The Director's order to suspend must include a written statement of the reasons for the suspension and must provide the person with an opportunity to respond in writing before the order becomes effective. The order shall provide the effective date and end date

of the suspension. The suspension period will be no more than: one (1) month for the first violation; six (6) months for the second; and twelve months (12) for any subsequent violations. The Director's decision shall be final.

(d) A final decision of the Director to suspend a registration may be appealed to the Board of Appeals in the manner prescribed in Article 1 of the San Francisco Business and Tax Regulations Code. Any person who fails to appeal the Director's decision to the Board of Appeals within the time specified may not challenge a decision or final order of the Director in any judicial proceedings brought to enforce the decision or order or for other remedies.

Within ninety (90) days of the decision of the Board of Appeals, a person may file with a Court of competent jurisdiction a petition for writ of mandate to review the Board of Appeals decision, provided that the responsible party has exhausted its administrative remedies. Any person who fails to file a petition within this 90-day period may not challenge a decision or final order of the Board of Appeals in any judicial proceedings brought to enforce the decision or order or for other remedies. Section 1094.5 of the California Code of Civil Procedure shall govern any proceedings conducted pursuant to this Section. In all proceedings pursuant to this Section, the Court shall affirm the Board of Appeal's decision if it is based upon substantial evidence in the whole record. This Section does not prohibit the Court from granting any appropriate relief within its jurisdiction.

(e) The Director may request the City Attorney or the District Attorney, as the case may be, to commence an action to enforce this Chapter.

(i) **Civil Penalties**. Any person who violates this Chapter shall be civilly liable to the City and County of San Francisco for a civil penalty in an amount not to exceed one-thousand dollars ($1,000) for each day in which the violation occurs. Each day that such violation continues shall constitute a separate violation. For a second violation of the Chapter, the civil penalty will be not less than one thousand dollars ($1,000) and not more than five thousand dollars ($5,000) for each day in which the violation occurs. In determining civil penalties, the court shall consider the extent of harm caused by the violation(s), the nature and persistence of the violation(s), the length of time over which the violation(s) occur(s), the frequency of past violations, any action taken to mitigate the violation, and the financial burden to the violator.

(ii) **Criminal Penalties**. Each violation shall be considered a separate misdemeanor punishable by a fine not exceeding than one thousand dollars ($1,000), or imprisonment not to exceed six (6) months in the County Jail, or both. In determining criminal penalties, the court shall consider the extent of harm caused by the violation(s), the nature and persistence of the violation(s), the length of time over which the violation(s) occur(s), the frequency of past violations, any action taken to mitigate the violation, the financial burden to the violator, and such other factors as deemed relevant and material.

f) Remedies under this Section are in addition to and do not supersede or limit any and all other remedies, civil or criminal.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1411. REPORTS.

Within two (2) years of the effective date of this Chapter, the Director shall report to the Commission on the Environment on the results of this ordinance, including the quantity recovered from landfill, and any recommended amendments of the ordinance.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1412. FORMS, REGULATIONS AND GUIDELINES.

(a) Consistent with the intent of this Chapter, and after consultation with other City departments, public notice and a public meeting, the Director may adopt forms, regulations, and guidelines as directed by this Chapter and as necessary and appropriate to implement this Chapter.

(b) The Department shall provide assistance and consulting to persons subject to this Chapter regarding compliance with this Chapter.

(c) The Director, consistent with this Chapter, may waive any specific requirement of this Chapter if the person seeking the waiver has demonstrated that strict application of the specific requirement would create practical difficulties not generally applicable to other persons in similar circumstances. The Director shall specify in writing the basis for any waiver under this Section.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1413. COST OF IMPLEMENTATION.

The Director shall determine the cost of implementing this Chapter. The Director may request that relevant City departments provide work orders to the Director to cover the cost of implementing and maintaining the program required by this Chapter.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1414. RESERVED.

SEC. 1415. DISCLAIMER OF LIABILITY.

The degree of protection required by this Chapter is considered to be reasonable for regulatory purposes. The standards set forth in this Chapter are minimal standards and do not imply that compliance will ensure proper handling of construction and demolition debris. This Chapter shall not create liability on the part of the City, or any of its officers or employees for any damages that result from reliance on this Article or any administrative decision lawfully made in accordance with this Chapter. All persons handling construction and demolition debris within the City should be and are advised to conduct their own inquiry as to the handling of such materials. In undertaking the implementation of this Chapter, the City is assuming an undertaking only to promote the general welfare. It is not assuming, nor is it imposing on its officer and employees, an obligation for breach of

which it is liable in money damages to any person who claims that such breach proximately caused injury.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1416. DUTIES ARE DISCRETIONARY.

Subject to the limitations of due process and applicable requirements of State or federal laws, and notwithstanding any other provisions of this Code whenever the words "shall" or "must" are used in establishing a responsibility or duty of the City, its elected or appointed officers, employees or agents, it is the legislative intent that such words establish a discretionary responsibility or duty requiring the exercise of judgement and discretion.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 1417. SEVERABILITY.

If any section, subsection, sentence, clause, or phrase of this Chapter is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of the Chapter. The Board of Supervisors hereby declares that it would have passed this Chapter and each and every section, subsection, sentence, clause, or phrase not declared invalid or unconstitutional without regard to whether any portion of this Chapter would be subsequently declared invalid or unconstitutional.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

* * * * *

BUILDING CODE SECTION 106.3.2.2

Section 106.3.2.2. Add the following section:

[Amended 2-7-2006 by Ord. No. 27-06]

22

106.3.2.2 Demolition. An application for a permit to demolish a building or structure shall not be deemed complete until (a) the applicant declares under penalty of perjury that every party who has a recorded interest in the property that is the subject of the application has been notified of the filing of the application. See Section 110, Table 1-L - Public Information - for fee to defray the cost of maintaining records of such declarations and other attendant costs and (b) the Department receives written notice from the Department of the Environment that the Department of the Environment has approved the applicant's waste diversion plan in accordance with Chapter 14 of the Environment Code.

Endnotes

22	This section contains a change from the original publication of the 2001 San Francisco Building Code.

* * * * *

BUILDING CODE

1
CHAPTER 13B
CONSTRUCTION AND DEMOLITION DEBRIS RECOVERY PROGRAM

SECTION 1301B — TITLE

[Added 2-7-2006 by Ord. No. 27-06]

This chapter shall be known as the "Construction and Demolition Debris Recovery Program."

SECTION 1302B — RECOVERY OF CONSTRUCTION AND DEMOLITION DEBRIS.

[Added 2-7-2006 by Ord. No. 27-06]

Under the requirements set forth herein and in Chapter 14 of the Environment Code, all construction and demolition debris in amounts of one cubic yard or greater generated in the course of a construction or demolition project must be transported off the site by a registered transporter, unless transported by the owner of the site, and handled, processed and otherwise managed by a registered facility for recovery of the materials. All persons subject to these requirements, including an applicant for any building or demolition permit shall comply with the requirements for construction and demolition debris recovery set forth in Chapter 14 of the Environment Code.

SECTION 1303B — DEFINITIONS.

[Added 2-7-2006 by Ord. No. 27-06]

"Construction and Demolition Debris" shall mean building materials and solid waste generated from construction and demolition activities, including, but not limited to, fully-cured asphalt, concrete, brick, rock, soil, lumber, gypsum wallboard, cardboard and other associated packaging, roofing material, ceramic tile, carpeting, fixtures, plastic pipe, metals, tree stumps, and other vegetative matter resulting from land clearing and landscaping for construction, deconstruction, demolition or land developments. This term does not include refuse regulated under the 1932 Refuse Collection and Disposal Initiative Ordinance or sections of the Municipal Code that implement the provisions of that ordinance; materials from the public right-of-way; or, unless specified in Chapter 14 of the Environment Code, materials source separated for reuse or recycling. Hazardous waste, as defined in

California Health and Safety Code section 25100 et seq., as amended, is not Construction and Demolition Debris for purposes of this Chapter.

"Registered Transporter" or "Registered Facility" shall mean a person who holds a valid registration issued by the Director of the Department of the Environment pursuant to Chapter 14 of the Environment Code. "Transporter" does not include a person that owns and operates only vehicles with no more than two axles and no more than two tires per axle.

SECTION 1304B — PERMIT CONDITION.

[Added 2-7-2006 by Ord. No. 27-06]

The provisions of Chapter 14 of the Environment Code and any approvals or conditions imposed in writing by the Department of the Environment are conditions of the permit issued by the Department under section 106.1, and a violation of Chapter 14 or such approvals or conditions shall be deemed non-compliance with the permit.

SECTION 1305B — PERMIT NOTIFICATION.

[Added 2-7-2006 by Ord. No. 27-06]

Permit application materials shall bear notice of and reference to the above requirements and the owner's responsibility for compliance with such requirements.

Endnotes

1	This section contains a change from the original publication of the 2001 San Francisco Building Code.

* * * * *

HEALTH CODE SECTIONS 288 AND 288.1

SEC. 288. CONSTRUCTION AND DEMOLITION DEBRIS.

No commercial establishment, dwelling, householder or other person or entity, including the City and County of San Francisco, shall place out for regular refuse collection any construction and demolition debris. Unless otherwise required by Chapter 14 of the Environment Code or acceptable in an on-site residential or commercial recycling or composting collection program, construction and demolition debris must be disposed of at a construction and demolition debris facility registered pursuant to Chapter 14 of the Environment Code. For purposes of this section, construction and demolition debris means building materials and solid waste generated by construction and demolition activities, including but not limited to: fully-cured asphalt, concrete, brick, rock, soil, lumber, gypsum wallboard, cardboard and other associated packaging, roofing material, ceramic tile, carpeting, fixtures, plastic pipe, metals, tree stumps, and other vegetative matter resulting from land clearing and landscaping for construction, deconstruction, demolition or land developments. Construction and demolition debris does not include any refuse regulated under the 1932 Refuse Collection and Disposal Initiative Ordinance or sections of the Municipal Code that implement the provisions of that ordinance.

Hazardous waste, as defined in California Health and Safety Code section 25100 et seq., as amended, is not construction and demolition debris for purposes of this section.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

SEC. 288.1. PENALTY.

Any person, firm or corporation violating any of the provisions of Section 288 of this Article shall be guilty of an infraction and, upon conviction thereof, shall be punished for the first offense by a fine of not less than $80 nor more than $100; and for a second offense by a fine of not less than $150 nor more than $200; and for each additional offense by a fine of not less than $250 nor more than $500. In the alternative, any person, firm or corporation violating any of the provisions of Section 288 of this Article may be assessed an administrative penalty not to exceed $300 for each violation. Such penalty shall be assessed, enforced and collected in accordance with Section 39-1 of the Police Code.

(Added by Ord. 27-06, File No. 051142, App. 2/16/2006)

* * * * * * *

POLICE CODE SECTION 39-1

SEC. 39-1. PROCEDURE FOR ASSESSMENT AND COLLECTION OF ADMINISTRATIVE PENALTIES FOR SPECIFIED LITTERING AND NUISANCE VIOLATIONS.

(a) This Section shall govern the imposition, assessment and collection of administrative penalties imposed pursuant to Sections 37, 38 and 63 of the Police Code, Sections 41.13, 283.1, 287, 288.1 and 600 of the Health Code, and Sections 170, 173, 174, 174.2, 184.63 and 724.5 of the Public Works Code.

(b) The Board of Supervisors finds:

(1) That it is in the best interest of the City and its citizens to provide an alternative, administrative penalty mechanism for enforcement of the littering and nuisance violations covered by this section in addition to the existing enforcement mechanisms authorized under the California Penal Code; and

(2) That the administrative penalty scheme established by this section is not intended to be punitive in nature, but is instead intended to compensate the public for the injury and damage caused by the prohibited conduct. The administrative penalties authorized under this section are intended to be reasonable and not disproportionate to the damage or injury to the City and the public caused by the prohibited conduct.

(c) Administrative Citation. Where an officer or employee designated in Section 38 determines that there has been a violation of a local litter or nuisance law that authorizes imposition of an administrative penalty, the officer or employee may issue an administrative

citation to the person and/or entity responsible for the violation. For purposes of this Section, an entity is responsible if an officer, employee or agent of the entity commits the violation. The citation shall inform the person or entity responsible of the date, time, place and nature of the violation and the amount of the proposed penalty, and shall state that the penalty is due and payable to the City Treasurer within 15 City business days from the date of the notice, if not contested within the time period specified. The citation shall also state that the person or entity responsible has the right, pursuant to Subsection (d), to request administrative review of the citing officer or employee's determination as to the violation and assessment of penalties, and shall set forth the procedure for requesting administrative review. The Director shall serve the administrative citation as follows:

1. Where there is a nexus between the violator and a specific property:

(A) One copy of the Notice shall be posted in a conspicuous place upon the building or property.

(B) One copy of the Notice shall be served upon each of the following:

(i) The person, if any, in real or apparent charge and control of the premises or property involved;

(ii) The owner of record.

Service required by subparagraph (B) may be made by personal service or by certified mail.

2. Where the issuing officer or employee is unable to ascertain a nexus between the violation and property within the City, a completed copy of the administrative citation may be served on the individual who has committed the violation by personal service or by certified mail.

3. For purposes of this Section, there is a nexus where activity on the property has caused, contributed to, or been a substantial factor in causing, the violation.

(d) Request for Hearing; Hearing.

(1) A person or entity that has been issued an administrative citation may request administrative review in order to contest the citation issued in accordance with this section. Administrative review shall be initiated by filing a request for administrative review with the Director of Public Works within 15 City business days from the date of the citation. Failure to request a hearing within the time specified in the citation shall be deemed an admission that the cited person or entity committed the violation identified in the administrative citation.

(2) Whenever administrative review is requested pursuant to this Section, the Director of Public Works shall, within five City business days of receipt of the request, notify the requestor of the date, time, and place of the administrative review hearing by certified

mail. Such hearing shall be held no later than thirty (30) calendar days after the Director receives the request, unless time is extended by mutual agreement of the affected parties.

(3) The administrative review hearing shall be conducted by a neutral hearing of officer from outside the Department of Public Works and the department whose employee issued the citation, assigned by the Director of Administrative Services. The Director of Administrative Services may issue rules as needed to implement this requirement. The parties may present evidence and testimony to the hearing officer. All testimony shall be under oath. The hearing officer shall ensure that a record of the proceedings is maintained. The burden of proof to uphold the violation shall be on the City, but the administrative citation shall be prima facie evidence of the violation.

(4) The hearing officer shall issue a decision including a summary of the issues and the evidence presented, and findings and conclusions, within ten (10) calendar days of the conclusion of the hearing. The hearing officer may uphold the penalty imposed by the citation, reduce the penalty, or dismiss the citation. A copy of the decision shall be served by certified mail upon the person or entity contesting the violation. The decision shall be a final administrative determination. An aggrieved party may seek judicial review of the decision pursuant to California Code of Civil Procedure Sections 1094.5 and 1094.6.

(e) Payment and Collection of Penalty.

(1) Where a person or entity has not made a timely request for administrative review, the penalty shall be due and payable to the City Treasurer on or before 15 City business days from the date of issuance.

(2) Where a person or entity has made a timely request for administrative review, and the penalty has been upheld in whole or in part upon review, any administrative penalty imposed by the hearing officer shall be due and payable not later than ten City business days from the date of the notice of decision issued under subparagraph (d)(4).

(3) If a penalty due and payable under paragraphs (1) or (2) remains unpaid after the specified due date, the Director of Public Works shall send the violator written notice that the penalty is overdue. Penalties that remain unpaid 30 days after the due date shall be subject to a late payment penalty of ten percent (10%) plus interest at the rate of one percent (1%) per month on the outstanding balance, which shall be added to the penalty amounts from the date that payment is due. Persons and entities against whom administrative penalties are imposed shall also be liable for the costs and attorney's fees incurred by the City and County in bringing any civil action to enforce the provisions of this section, including obtaining a judgment for the amount of the administrative penalty and other costs and charges.

(4) Where there is a nexus between the violation and property in the City owned by the violator, the Director shall further inform the violator that if the amount due is not paid

within 30 days from the date of the notice, the Director shall initiate proceedings to make the amount due and all additional authorized costs and charges, including attorneys fees. a lien on the property. Such liens shall be imposed in accordance with Chapter l0, Article XX of the Administrative Code.

(f) The revenues generated by penalties from an administrative citation issued pursuant to this Section may be expended only by the department that is responsible for issuing the administrative citation, except that each department other than Public Works that issues administrative citations pursuant to this Section shall reimburse the Department of Public Works for the costs incurred by the Department of Public Works in administering review of those citations issued by the other department. The revenues from administrative citations issued by Class 8280 Environmental Control Officers and 8282 Senior Environmental Control Officers may be expended exclusively by the Department of Public Works for the purpose of funding litter enforcement and abatement except where the use or expenditure of those revenues is specifically directed by law to another program within the Department of Public Works.

(Added by Ord. 87-03, File No. 030482, App. 5/9/2003; amended by Ord. 27-06, File No. 051142, App. 2/16/2006)

ATTACHMENT G
Project Sponsor Letter

May 1, 2019

John S. Rahaim, Planning Director
San Francisco Planning Department
1650 Mission Street, Suite 400
San Francisco, CA 94103

Re: Balboa Reservoir Mixed-Use Project Acknowledgment of Obligations under Public Resources Code Sections 21183(e), (f), and (g)

Dear Mr. Rahaim,

Reservoir Community Partners, LLC (Applicant) is submitting an application to the Governor's Office of Planning and Research as well as the California Air Resources Board for certification of the Balboa Reservoir Mixed-Use Project as an Environmental Leadership Development Project (ELDP) subject to streamlined review by the judiciary under the Jobs and Economic Improvement through Environmental Leadership Act of 2011, as amended (the Act).

By this letter, the Applicant acknowledges and agrees to its obligations under Public Resources Code Sections 21183(e), (f), and (g), as follows:

> The Applicant agrees that all mitigation measures required pursuant to CEQA to certify the Project under the Act shall be conditions of approval, that these conditions will be fully enforceable by the San Francisco Planning Department, Department of Building Inspection, Health Department, Department of the Environment, or other agency designated by the City for the life of the obligation (Public Resources Code Section 21183(e)).
>
> The Applicant agrees to pay the costs of the Court of Appeal in hearing and deciding any case, including payment of the costs for the appointment of a special master if deemed appropriate by the court, in a form and manner specified by the Judicial Council, as provided in the Rules of Court adopted by the Judicial Council pursuant to the Act (Public Resources Code Section 21183 (f)).
>
> The Applicant agrees to pay the costs of preparing the record of proceedings for the Project concurrent with review and consideration of the Project pursuant to CEQA, in a form and manner specified by the Planning Department or other City agency (Public Resources Code Section 21183 (g)).

Sincerely,

Reservoir Community Partners, LLC

By:

Name: Joe Kirchofer

Title: Vice President AvalonBay Communities

By:

Name: Brad Wilbin

Title: Executive Vice President at Bridge Housing

Acknowledged and agreed:

Name:

Title:

ENVIRONMENT
& HEALTH

MEMO

Date	**October 22, 2019**
To	**Shannon Hatcher, California Air Resources Board**
From	**Michael Keinath** **Sarah Manzano**
subject	**Response to ARB September 24, 2019 Questions on AB900 Application for Balboa Reservoir in San Francisco, California**

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Thank you for your questions on the AB900 Application for Balboa Reservoir. Below are our responses to these questions.

TABLE A.3

Table A.3 (pg. 122/840) indicates a trip rate of 1.86 trips/unit for residential land uses. It is assumed the application trip rates were derived from the trip data presented in Appendix C of the application (pg. 86/840). Please confirm.

> Response: The trip rate of 1.86 trips/unit is derived from residential 2,041 trips/day divided by 1,100 Dwelling Units from page 82's table- *Transportation Demand Management Program - Vehicle Trip Reduction*, and age 84's table- *Developer's Proposed Option with TDM Plan.*

In addition, Appendix B of the application indicates assorted trip rates that are not reported in Table A.3 (e.g., 24.27 trips/day for the parking facilities on pg. 154/840 and 16.93 trips/day for the parking facilities on pg. 272/840), nor in Appendix C of the application. Please indicate the sources for all trip rates used in the analysis, how they were derived, and update Table A.3, as appropriate.

> Response**:** These trips are reported in Table A.3 as the total service vehicle trips for phase 1 and phase 2, rounded to the nearest whole number. Service vehicle trips were provided in Table 8 of the Kittelson & Associates. 2019. Travel Demand Memorandum – Final. January 14.[1] Then they were apportioned between Phase 1 and Phase 2 by number of dwelling units by residential, retail, and day care.

TABLE A.8

Table A.8 (pg. 127/840) indicates Phase 1 2024 mobile emissions are 888 MT/year, which is supported by the CalEEMod modeling outputs found on pg 161/840.

[1] Available online at: https://citypln-m-extnl.sfgov.org/SharedLinks.aspx?accesskey=ddee36ad8d171e4bd4f2befdbbf078413b125d20c47c9ad9835e90a852b2ca6d&VaultGUID=A4A7DACD-B0DC-4322-BD29-F6F07103C6E0

However, Phase 2 2027 mobile emissions from Table A.8 are 558 MT/year, while the CalEEMod modeling outputs found indicate Phase 2 emissions should be 603.4 MT/year (pgs. 274/840, 345/840, etc.). Please conform the appropriate 2027 mobile emissions and how they were derived.

Response**:** The CalEEMod default vehicle emission factors were updated to incorporate EMFAC2017 emission factors. Even though Phase 2 buildout is expected in 2027, both Phase 1 and Phase 2 used vehicle emission factors for 2024, as evidenced by the fact that the vehicle emission factors are the same in the provided CalEEMod input files. Therefore, to report vehicle emissions in 2027 for Phase 2, the emissions in the CalEEMod output file needed to be scaled by the ratio of emission factors in 2027 and 2024. The emission factors for 2027 and 2024 are 0.00033 metric tonnes per mile and 0.00036 metric tonnes per mile, respectively, as shown in Table A.5, which is an 8% reduction from 2024 to 2027. Therefore, the emissions shown in the CalEEMod output of 603.4 metric tonnes per year were reduced by 8% to get the value shown in Table A.8 (603.4 x 0.92 = 558 metric tonnes per year).

TABLE A.9

It appears that emissions reduce substantially after 2053 (for example, natural gas drops from 581 MT/year in 2053 to 215 MT/year in 2054, while mobile source emissions drops from 1,152 MT/year in 2053 to 466 MT/year in 2024, while there is no new RPS nor Clean Cars reductions for these years). Does this indicate a lowering of natural gas usage and VMT after 2053?

Response: Phase 1 reaches the end of its 30 year lifespan in 2054, so the emissions starting in 2054 are representing only those from Phase 2.

Onsite reduction measures - Proponents have committed to the following measures to reduce onsite GHG emissions:

- Title 24 utility compliance
- TDM consisting of
  - Car share program
  - Unbundle parking
  - Limit onsite parking
  - Improved design
    - Multimodal wayfinding
    - Real-time information display
    - Bike share membership, repair shop
    - Showers & Lockers
    - Delivery supportive amenities
    - Tailored transportation marketing
- Reduction of 250 parking spaces
- Addition of 1,000 residential units

Response: These measures are confirmed, with two clarifications. The showers and lockers will be included in the public parking structure and not in the residential parking structure. Further, there will be an addition of 1,100 residential units as opposed to 1,000 units listed above.

Suggest proponents consider the following measures

- EV chargers for residents
- EV chargers in public parking areas
- All-electric residences (i.e., no natural gas space heaters, water heaters, clothes dryers, fireplaces, etc.)
- PV Solar on the building roofs with battery storage

  Response: These measures are all under consideration for the Project. At this time, we are continuing to analyze both the financial and logistical feasibility as we continue through the design process.

Table A.8
Project Emissions
Balboa Reservoir AB900
San Francisco, California

Phase	Year	CO_2e Emissions (MT/yr)[1]									
		Area Sources	Energy		Mobile[2]	Waste	Water[3]		Stationary Source	Vegetation Reduction	Total
			Electricity	Natural Gas			Treatment	Transportation			
Proposed Project											
Phase 1	2024	22	544	366	888	153	58	47	7.7	0.0	2,086
Phase 2	2027	6	412	215	548	112	41	27	7.7	-13	1,355
Total[4]	2027	28	879	581	1,354	265	100	67	15	-13	3,276
Proposed Project Variant											
Phase 1	2024	25	689	459	1,082	201	77	60	23	0.0	2,616
Phase 2	2027	9	344	326	781	168	63	41	23	-13	1,743
Total[4]	2027	34	936	785	1,764	369	140	93	46	-13	4,153

Notes:

[1] Emissions estimated in CalEEMod.

[2] Mobile emissions estimated in CalEEMod for 2024 and 2027 using EMFAC2017 emission factors. Total 2027 mobile emissions are based on emissions in 2027 for both Phase 1 and Phase 2, as estimated in CalEEMod. Therefore, the total is not the sum of 2024 Phase 1 and 2027 Phase 2.

[3] Water emissions broken out by treatment and transportation to take into account the decreasing carbon intensity of the electrical grid used for the transportation of the water. Emissions from treatment only were estimated using a carbon intensity of 0 lb/MWh. Transportation emissions were the difference from the total water emissions and the treatment only emissions.

[4] Total emissions are the sum of Phase 1 and Phase 2, adjusted for the calendar year for electricity use, mobile emissions and water transportation emissions.

Abbreviations:

CO_2e - carbon dioxide equivalent
lb - pound
mi - mile
MWh - megawatt-hour
MT - metric ton
yr - year

Table A.9
Project CO_2e Emissions by Year
Balboa Reservoir AB900
San Francisco, California

Year	CO_2e (MT/yr)[1]											
	Area	Energy		Mobile[2]	Waste	Water[4]		Stationary Source	Construction[5]	Existing Trip Reductions	Vegetation Reduction	Total
		Electricity[2]	Natural Gas			Treatment	Transportation					
2021	--	--	--	--	--	--	--	--	1,611		0	1,611
2022	--	--	--	--	--	--	--	--	2,662		0	2,662
2023	--	--	--	--	--	--	--	--	2,426		0	2,426
2024	22	544	366	888	153	58	47	7.7	2,981	-83	0	4,984
2025	22	518	366	863	153	58	44	7.7	2,083	-83	0	4,032
2026	22	492	366	841	153	58	42	7.7	1,781	-83	0	3,681
2027	28	879	581	1,354	265	100	67	15	130	-83	-13	3,323
2028	28	830	581	1,324	265	100	63	15	--	-83	-13	3,110
2029	28	781	581	1,297	265	100	60	15	--	-83	-13	3,030
2030	28	734	581	1,273	265	100	56	15	--	-83	-13	2,956
2031	28	686	581	1,253	265	100	52	15	--	-83	-13	2,883
2032	28	637	581	1,234	265	100	49	15	--	-83	-13	2,813
2033	28	589	581	1,218	265	100	45	15	--	-83	-13	2,745
2034	28	541	581	1,205	265	100	41	15	--	-83	-13	2,679
2035	28	492	581	1,193	265	100	38	15	--	-83	-13	2,615
2036	28	444	581	1,183	265	100	34	15	--	-83	-13	2,553
2037	28	395	581	1,174	265	100	30	15	--	-83	-13	2,492
2038	28	347	581	1,166	265	100	27	15	--	-83	-13	2,432
2039	28	299	581	1,160	265	100	23	15	--	-83	-13	2,374
2040	28	250	581	1,155	265	100	19	15	--	-83	-13	2,317
2041	28	202	581	1,151	265	100	15	15	--	-83	-13	2,261
2042	28	154	581	1,147	265	100	12	15	--	-83	-13	2,205
2043	28	105	581	1,144	265	100	8	15	--	-83	-13	2,150
2044	28	57	581	1,142	265	100	4	15	--	-83	-13	2,095
2045	28	9	581	1,140	265	100	0.7	15	--	-83	-13	2,041
2046	28	9	581	1,137	265	100	0.7	15	--	-83	-13	2,039
2047	28	9	581	1,135	265	100	0.7	15	--	-83	0	2,050
2048	28	9	581	1,134	265	100	0.7	15	--	-83	0	2,048
2049	28	9	581	1,132	265	100	0.7	15	--	-83	0	2,047
2050	28	9	581	1,131	265	100	0.7	15	--	-83	0	2,046
2051	28	9	581	1,131	265	100	0.7	15	--	-83	0	2,046

Table A.9
Project CO_2e Emissions by Year
Balboa Reservoir AB900
San Francisco, California

Year	CO_2e (MT/yr)[1]											
	Area	Energy		Mobile[2]	Waste	Water[4]		Stationary Source	Construction[5]	Existing Trip Reductions	Vegetation Reduction	Total
		Electricity[2]	Natural Gas			Treatment	Transportation					
2052	28	9	581	1,131	265	100	0.7	15	--	-83	0	2,046
2053	28	9	581	1,131	265	100	0.7	15	--	-83	0	2,046
2054	28	9	581	1,131	265	100	0.7	15	--	-83	0	2,046
2055	28	9	581	1,131	265	100	0.7	15	--	-83	0	2,046
2056	28	9	581	1,131	265	100	0.7	15	--	-83	0	2,046

Notes:

[1] Mobile Emissions decrease in time based on San Francisco fleet-average emission factors as show in Table 6. Assumes no change after 2050, since EMFAC2017 does not project past 2050.

[2] The Carbon Intensity of electricity is assumed to linearly decline between RPS targets shown in Table 6.

[3] Assume all buildings become operational as soon as phase is constructed. The only changes in emissions are due to transportation and electricity becoming cleaner.

[4] Water emissions broken out by treatment and transportation to take into account the decreasing carbon intensity of the electrical grid used for transportation of the water. Emissions from treatment only were estimated using a carbon intensity of 0 lb/MWh. Transportation emissions were the difference from the total water emissions and the treatment only emissions.

[5] Construction Data provided by ESA (E1.1_CalEEMod_Additional_Developer_Unmit.pdf)

Abbreviations:

CO2e - carbon dioxide equivalent
lb - pound
MT - metric tones
MWh - megawatt-hour
yr - year

Table A.10
Project Variant CO_2e Emissions by Year
Balboa Reservoir AB900
San Francisco, California

Year	CO_2e (MT/yr)[1]											
	Area	Energy		Mobile[3]	Waste	Water[4]		Stationary Source	Construction[5]	Existing Trip Reductions	Vegetation Reduction	Total
		Electricity[2]	Natural Gas			Treatment	Transportation					
2021	--	--	--	--	--	--	--	--	1,611	--	--	1,611
2022	--	--	--	--	--	--	--	--	3,552	--	--	3,552
2023	--	--	--	--	--	--	--	--	3,217	--	--	3,217
2024	25	689	459	1,082	201	77	60	23	3,568	-321	--	5,863
2025	25	656	459	1,052	201	77	58	23	2,884	-321	--	5,112
2026	25	623	459	1,025	201	77	55	23	2,552	-321	--	4,718
2027	34	936	785	1,764	369	140	93	46	190	-321	-13	4,022
2028	34	884	785	1,724	369	140	88	46	--	-321	-13	3,735
2029	34	832	785	1,689	369	140	83	46	--	-321	-13	3,643
2030	34	781	785	1,659	369	140	78	46	--	-321	-13	3,557
2031	34	730	785	1,631	369	140	73	46	--	-321	-13	3,473
2032	34	679	785	1,608	369	140	68	46	--	-321	-13	3,393
2033	34	627	785	1,587	369	140	62	46	--	-321	-13	3,315
2034	34	576	785	1,569	369	140	57	46	--	-321	-13	3,241
2035	34	524	785	1,553	369	140	52	46	--	-321	-13	3,169
2036	34	473	785	1,540	369	140	47	46	--	-321	-13	3,099
2037	34	421	785	1,529	369	140	42	46	--	-321	-13	3,031
2038	34	370	785	1,519	369	140	37	46	--	-321	-13	2,965
2039	34	318	785	1,511	369	140	32	46	--	-321	-13	2,900
2040	34	267	785	1,504	369	140	27	46	--	-321	-13	2,837
2041	34	215	785	1,499	369	140	21	46	--	-321	-13	2,774
2042	34	164	785	1,494	369	140	16	46	--	-321	-13	2,713
2043	34	112	785	1,490	369	140	11	46	--	-321	-13	2,653
2044	34	61	785	1,487	369	140	6.0	46	--	-321	-13	2,593
2045	34	9	785	1,484	369	140	0.9	46	--	-321	-13	2,533
2046	34	9	785	1,482	369	140	0.9	46	--	-321	-13	2,531
2047	34	9	785	1,479	369	140	0.9	46	--	-321	0	2,541
2048	34	9	785	1,477	369	140	0.9	46	--	-321	0	2,539
2049	34	9	785	1,475	369	140	0.9	46	--	-321	0	2,537
2050	34	9	785	1,474	369	140	0.9	46	--	-321	0	2,536
2051	34	9	785	1,474	369	140	0.9	46	--	-321	0	2,536

Table A.10
Project Variant CO_2e Emissions by Year
Balboa Reservoir AB900
San Francisco, California

Year	CO_2e (MT/yr)[1]											
	Area	Energy		Mobile[3]	Waste	Water[4]		Stationary Source	Construction[5]	Existing Trip Reductions	Vegetation Reduction	Total
		Electricity[2]	Natural Gas			Treatment	Transportation					
2052	34	9	785	1,474	369	140	0.9	46	--	-321	0	2,536
2053	34	9	785	1,474	369	140	0.9	46	--	-321	0	2,536
2054	34	9	785	1,474	369	140	0.9	46	--	-321	0	2,536
2055	34	9	785	1,474	369	140	0.9	46	--	-321	0	2,536
2056	34	9	785	1,474	369	140	0.9	46	--	-321	0	2,536

Notes:

[1] Mobile Emissions decrease in time based on San Francisco fleet-average emission factors as show in Table 6. Assumes no change after 2050, since EMFAC2017 does not project past 2050.

[2] The Carbon Intensity of electricity is assumed to linearly decline between RPS targets shown in Table 6.

[3] Assume all buildings become operational as soon as phase is constructed. The only changes in emissions are due to transportation and electricity becoming cleaner.

[4] Water emissions broken out by treatment and transportation to take into account the decreasing carbon intensity of the electrical grid used for transportation of the water. Emissions from treatment only were estimated using a carbon intensity of 0 lb/MWh. Transportation emissions were the difference from the total water emissions and the treatment only emissions.

[5] Construction Data provided by ESA (E1.1_CalEEMod_Additional_Developer_Unmit.pdf)

Abbreviations:

CO2e - carbon dioxide equivalent
lb - pound
MT - metric tones
MWh - megawatt-hour
yr - year

December 11, 2019

Shannon Hatcher
Air Pollution Specialist
Transportation Analysis Section
Sustainable Communities Policy and Planning Division
California Air Resources Board 1001 I Street
P.O. Box2815
Sacramento, CA 95812-2815

Subject: Balboa Reservoir Project, Case No. 2015-014208ENV
Greenhouse Gas Emissions Offset Commitment Approach

Dear Mr. Hatcher,

The Applicant submitted the application seeking certification of the Project as an Environmental Leadership Development Project (ELDP) pursuant to AB 900. The project has committed to meeting the requirements set forth in California Public Resources Code Section 21183 (c), which requires that the Project demonstrate that it will not result in any net greenhouse gas (GHG) emissions and in Public Resources Code Section 21180(b)(l), which requires the Project to achieve a 15 percent greater standard for transportation efficiency than comparable projects. The Applicant has committed to no net increase in construction and operation-related GHG emissions. Consistent with policy recommendations included in CARB's 2017 Climate Change Scoping Plan[1], while offsets are a potential way to mitigate GHG emissions, other options will continue to be explored as well to the extent feasible, according to the following priority: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions, and (4) offset credits issued by an accredited carbon registry, such as the American Climate Registry (ACR), Climate Action Reserve (CAR), and Verra (formerly the Verified Carbon Standard or VCS). To the extent offsets are used to mitigate GHG emissions, prior to issuance of the final Certificate of Occupancy for the first building constructed in each phase of the project that exceeds the existing emissions, the project sponsor or its successor shall enter into one or more contracts to purchase carbon credits issued by an accredited carbon registry, such as ACR, CAR, and Verra, for the operational emissions attributable to that phase, which contract, together with any previous contracts, shall evidence the purchase of carbon credits in an amount sufficient to offset the remaining (after implementation of any identified, feasible project design feature/on-site reduction measures, off-site local reductions, or off-site regional reductions) operational emissions attributable to that phase over the analysis horizon of 30 years. The phases noted here are for GHG compliance purposes. Any changes to the actual order and phasing of the project construction would meet the standards for compliance based on the aggregate total phase emissions.

Prior to the issuance of grading permits for construction of each phase of the project, the project sponsor, or its successor shall enter into one or more contracts to purchase carbon credits issued by an accredited carbon registry, such as ACR, CAR, and Verra, for the construction emissions attributable to that phase.

Attachment E of the Project's AB 900 application contained a calculation of the net additional construction and operational GHG emissions associated with the Project. Greenhouse Gas Emissions during construction are illustrated in Table 4 while emissions from operations are shown in

[1]Available at: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf

Tables 5 and 6. The applicant will provide documentation to CARB and the Governor's office of any project design features/on-site reduction measures, off-site local reductions, or off-site regional reductions used to mitigate GHG emissions, and shall promptly submit copies of any executed contracts for purchased carbon credits to CARB and the Governor's office. Any identified project design features/on-site reduction measures, off site local reductions, or off-site regional reductions used to mitigate GHG emissions and any commitments to enter into contracts to offset net additional GHG emissions will be incorporated as conditions of project approval under the Public resources Code sec 21183(e) which shall be binding and enforceable by the lead agency.

Sincerely,

Balboa Reservoir Community Partners

OWNER:
Reservoir Community Partners, LLC,
a Delaware limited liability company
By its Members:

BHC BALBOA BUILDERS, LLC,
a California limited liability company

By: _____
Name: Brad Wiblin
Title: Executive Vice President

AVB BALBOA, LLC,
a Delaware limited liability company
By: AvalonBay Communities, Inc.,
A Maryland corporation, its sole member

By: _____
Name: Joe Kirchofer
Title: Vice President

From:	Nora Collins
To:	Hatcher, Shannon@ARB
Cc:	Joe Kirchofer; Michael Keinath
Subject:	RE: Balboa - AB900 Application
Date:	Tuesday, December 17, 2019 12:27:10 PM
Attachments:	image001.png

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Shannon – please see updated note below with the November 14 calcs.

-

Dear Mr. Hatcher,

Per your request on December 12, 2019, Reservoir Community Partners, LLC, a joint venture between BRIDGE Housing Corporation [a non-profit affordable housing developer] and AvalonBay Communities and the Project Sponsor for the Balboa Reservoir Mixed-Use Project, is committing to offset the entire projected greenhouse gas emissions reported in our June 12, 2019 application. This reflects a total of 90,993 MT (13,673 MT construction, 77,320 MT operation) for the Proposed Project and 111,650 MT CO2e (17,574 MT construction, 94,076 MT operation) for the Proposed Project Variant (as reflected in Table 6 of Attachment E of the application).

Please let us know if you have any questions or need additional information to approve our application. Thank you for your consideration.

Best regards,

Nora

AvalonBay

Nora Collins
Development Director

AvalonBay Communities, Inc.
455 Market Street, Suite 1650
San Francisco, CA 94105
Phone: 415.284.9094
Cell: 301.892.2513
Fax: 415.546.4138
nora_collins@avalonbay.com

From: Nora Collins
Sent: Tuesday, December 17, 2019 11:35 AM
To: Shannon Hatcher <shannon.hatcher@arb.ca.gov>
Cc: Joe Kirchofer <Joe_Kirchofer@avalonbay.com>; Michael Keinath <mkeinath@ramboll.com>
Subject: Balboa - AB900 Application

Dear Mr. Hatcher,

Per your request on December 12, 2019, Reservoir Community Partners, LLC, a joint venture between BRIDGE Housing Corporation [a non-profit affordable housing developer] and AvalonBay Communities and the Project Sponsor for the Balboa Reservoir Mixed-Use Project, is committing to offset the entire projected greenhouse gas emissions reported in our June 12, 2019 application. This reflects a total of 88,496 MT (13,673 MT construction, 74,823 MT operation) for the Proposed Project and 108,456 MT (17,574 MT construction, 90,882 MT operation) for the Proposed Project Variant (as reflected in Table 6 of Attachment E of the application).

Please let us know if you have any questions or need additional information to approve our application. Thank you for your consideration.

Best regards,

Nora

AvalonBay

Nora Collins
Development Director

AvalonBay Communities, Inc.
455 Market Street, Suite 1650
San Francisco, CA 94105
Phone: 415.284.9094
Cell: 301.892.2513
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