



KPC EHS Consultants, LLC

Technical Memorandum

Kevin P. Carr, MS.

Date: November 16, 2023 **Revised June 12, 2024**

Re: EPC 23-29 Hickory Street – Escondido Residential Project – Energy Technical Memorandum

1.0 Purpose

The purpose of this memorandum is to document the proposed Project's estimated energy use as it relates to the potential environmental impacts associated with the construction and operation of the proposed Multi-family Residential Project on approximately 0.69 acres.

Project Location & Description

1.1 Project Location:

The proposed project site is located in the City of Escondido, San Diego County, California on the northeast intersection of South Hickory Street and East 3rd Avenue at 240 South Hickory Street also referred to as APN 229-492-14-00.

1.2 Description:

The Applicant is proposing the renovation of an existing 16,885 square foot medical office building into 20 residential units with both interior and exterior improvements including installations of kitchens and bathrooms in each unit, shared laundry facility, tenant storage space, the creation of an outdoor community area, and upgrades to the existing parking lot and landscaping on approximately 0.69 acres.

2.0 Energy Assessment

2.1 Determination of Significance:

The criteria used to determine the significance related to potential Project related air quality and greenhouse gas emission impacts is based on the California Environmental Quality Act (CEQA) Environmental Checklist, Appendix G Thresholds:

2.1.1 Energy Impacts:

Would the Project: Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Would the Project: Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

2.2 Construction Energy Analysis:

Construction of the Project would require the use of fuel and electric powered equipment and vehicles for construction activities. The majority of activities would use fuel powered equipment and vehicles that would consume gasoline or diesel fuel. Heavy construction equipment (e.g., dozers, graders, backhoes, dump trucks) would be diesel powered, while smaller construction vehicles, such as pick-up trucks and personal vehicles used by workers would be gasoline powered. The majority of electricity use would be from power tools. The anticipated construction schedule using the California Emissions Estimator Model (CalEEMod) defaults assumes the Project would be built in approximately 116-day construction schedule.¹ The consumption of energy would be temporary in nature and would not represent a significant demand on available supplies. There are no unusual characteristics that would necessitate the use of fuel or electricity that would be less energy efficient than at comparable construction sites in the region or State.

Starting in 2014, the California Air Resources Board (CARB) adopted the nation's first regulation aimed at cleaning up off-road construction equipment such as bulldozers, graders, and backhoes. These requirements ensure fleets gradually turnover the oldest and dirtiest equipment to newer, cleaner models and prevent fleets from adding older, dirtier equipment. As such, the equipment used for Project construction would conform to CARB regulations and California emissions standards as fuel efficiencies gradually rise. It should also be noted that there are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in construction of the Project would therefore not result in inefficient, wasteful, or unnecessary consumption of fuel.

In addition, as required by state law², idling times of construction vehicles is limited to no more than five minutes, thereby minimizing, or eliminating unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Equipment employed in construction of the Project would therefore not result in inefficient, wasteful, or unnecessary consumption of fuel.

Table 2.2-1 presents the estimated Project's construction equipment fuel demand calculations based on the CalEEMod default equipment and schedule. The Horsepower hours per day (HP hrs/day) was calculated by taking the number of equipment times the operating hours per day, times the horsepower, times the load factor. The HP hrs/day was then multiplied by the number of days for the phase and divided by 18.5 to estimate the total fuel demand. The 18.5 value is the estimated fuel consumption rate from the California Air Resources Board (CARB) The Carl Moyer Program Guidelines, 2017 Revisions, Appendix D, Table D-21 Fuel Consumption Rate Factors, for engines of less than 750 HP.³ As indicated in Table 2.2-1 the total construction equipment fuel demand is estimated to be 6,704 gallons of diesel fuel.

¹ CalEEMod Datasheets, Appendix A..

² California Code of Regulations Title 13, Motor Vehicles, section 2449(d)(3) Idling.

³ Carl Moyer Program Guidelines accessed: https://ww2.arb.ca.gov/sites/default/files/2020-06/2017_cmpgl.pdf

Table 2.2-1 Construction Equipment Fuel Demand

Construction Phase	Offroad Equipment Type	Number per Day	Hours per Day	Horse power	Load Factor	HP hrs/day	Number of Days	Total Fuel Demand (gal diesel fuel)
Demolition	Concrete/Industrial Saws	1	8	33.0	0.73	193	10	104
	Rubber Tired Dozers	1	1	367	0.40	147	10	79
	Tractors/Loaders/Backhoes	2	6	84	0.37	382	10	200
Site Preparation	Tractors/Loaders/Backhoes	1	8	84	0.37	249	1	13
	Graders	1	8	148	0.41	485	1	26
Building Construction	Cranes	1	4	367	0.29	426	100	2,302
	Forklifts	2	8	82	0.20	262	100	1,416
	Tractors/Loaders/Backhoes	2	7	84	0.37	435	100	2,351
Paving	Cement & Mortar Mixers	4	6	10	0.42	101	5	27
	Pavers	1	7	81	0.42	238	5	64
	Rollers	1	7	36	0.38	96	5	26
	Tractors/Loaders/Backhoes	1	8	84	0.37	249	5	67
Architectural Coating	Air Compressors	1	6	37	0.48	107	5	29
Total Construction Equipment Fuel Demand								6,704

Table 2.2-2 presents the estimated Project’s construction worker and vendor trip fuel demand calculations based on the CalEEMod defaults and schedule. The one-way trips per day were multiplied by the CalEEMod miles per trip, times the number of days for the phase to get total miles. The total miles were then divided by the average fuel use in miles per gallon (MPG) to arrive at the fuel demand for worker and vendor trips. As indicated in Table 2.2-1 the total construction equipment fuel demand is estimated to be 703 gallons of fuel.

Table 2.2-2 Construction Worker & Vendor Fuel Demand

Construction Phase	Trip Type	One-Way Trips per Day	Miles per Trip	Number of Days	Total Miles	Average Fuel Use (MPG)	Total Fuel Demand (gallons)
Demolition	Worker	10	12	10	1,200	31.0	39
Site Preparation	Worker	5	12	1	60	31.0	2
Building Construction	Worker	14.4	12	100	17,280	31.0	557
	Vendor	2.14	7.63	100	1,633	25.0	65
Paving	Worker	17.5	12	5	1,050	31.0	34
Architectural Coating	Worker	2.88	12	5	173	31.0	6
Total Construction Worker Trip Fuel Demand							703

2.3 Operational Energy Analysis:

During operations the Project would generate demand for electricity, natural gas, as well as fuels (gasoline and diesel) for motor vehicle trips. Operational use of energy includes the heating, ventilation, air conditioning, lighting, water heating, operation of electrical systems and plug-in appliances within buildings and parking lot. These uses of energy are typical for urban development, and no operational activities or land uses would occur that would result in extraordinary energy consumption.

Operational Transportation Energy.

The operations-related vehicle trips fuel usage was calculated using the CalEEMod data Table 5.9.1 (Appendix A) for annual vehicle miles traveled, which determined that operation of the proposed Project would generate 274,013 vehicle miles traveled per year. The calculated total operational miles were then divided by the average rates of 30.5 miles per gallon for automobiles, which was calculated through use of the EMFAC2022 model (Appendix B) and based on the year 2024. Based on this information, the operation of automobiles related to the Project would consume 8,984 gallons per year.

Operational Electricity Use.

The operations-related electricity usage was calculated from the CalEEMod data (Appendix A) and determined operation of the Project would consume the following electricity:

- Multi-Family Housing 67,817 kWh/year
- Parking Lot 18,545 kWh/year

Based on the above, it is anticipated that the proposed Project would utilize 86,362 kWh per year of electricity.

Operational Natural Gas Use.

The operations-related natural gas usage was calculated by a CalEEMod model run that determined operation of the Project would consume unmitigated natural gas per each individual use shown in kilo British Thermal Units (kBTU) per year:

- Multi-Family Residential 141,569 kBTU/year

Based on the above, it is anticipated that the proposed project will use an unmitigated total of 141,569 kBTU per year of natural gas.

3.0 Conformity and Consistency:

The proposed Project would be required to meet the CCR Title 24 energy efficiency standards in effect during permitting of the Project. Energy-saving and sustainable design features and operational programs would be incorporated into the Project as per CalGreen. Prior to the issuance of the building permit the Project's facility energy efficiencies would be documented as part of the City's development review process. The City as part of the Project review will assess the design components and energy conservation measures during the permitting process,

which ensures that all requirements are met, and the Project will be in compliance with the County's General Plan energy efficiency requirements.

Additionally, regulatory measures, standards, and policies directed at reducing air pollutant emissions and GHG emissions would also act to promote energy conservation and reduce Project energy consumption such as the limits imposed by CCR Title 13, Section 2449(d)(3) on idling. Also, the Project would not conflict with or obstruct opportunities to use renewable energy, such as solar energy. Based on the preceding the proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

4.0 Conclusion

Based on the assessment in Sections 2.0 and 3.0 there are less than significant impacts of the Proposed Project associated with Energy, and no mitigation would be required. As such, the project will have a less than significant impact due to wasteful, inefficient, or unnecessary consumption of energy resources during construction and operation.

Additionally, the Project would not conflict with or obstruct opportunities to use renewable energy, such as solar energy. Based on the preceding the proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.



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APPENDIX A
CalEEMod Datasheets

Hickory Street Residential Custom Report

Table of Contents

1. Basic Project Information
 - 1.1. Basic Project Information
 - 1.2. Land Use Types
 - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
2. Emissions Summary
 - 2.1. Construction Emissions Compared Against Thresholds
 - 2.2. Construction Emissions by Year, Unmitigated
 - 2.4. Operations Emissions Compared Against Thresholds
 - 2.5. Operations Emissions by Sector, Unmitigated
3. Construction Emissions Details
 - 3.1. Demolition (2024) - Unmitigated
 - 3.3. Site Preparation (2024) - Unmitigated
 - 3.5. Building Construction (2024) - Unmitigated
 - 3.7. Paving (2024) - Unmitigated

3.9. Architectural Coating (2024) - Unmitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Hickory Street Residential
Construction Start Date	1/2/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	26.6
Location	240 S Hickory St, Escondido, CA 92025, USA
County	San Diego
City	Escondido
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6285
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.20

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
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Apartments Mid Rise	20.0	Dwelling Unit	0.21	16,885	3,000	—	56.0	—
Parking Lot	54.0	Space	0.49	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.74	22.5	5.72	7.72	0.01	0.26	0.15	0.39	0.24	0.03	0.27	—	1,499	1,499	0.06	0.02	0.70	1,508
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.74	0.62	5.73	7.64	0.01	0.26	0.57	0.81	0.24	0.07	0.29	—	1,491	1,491	0.06	0.02	0.02	1,499
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.23	0.51	1.79	2.38	< 0.005	0.08	0.04	0.12	0.07	0.01	0.08	—	453	453	0.02	0.01	0.09	455
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.04	0.09	0.33	0.43	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.02	—	75.0	75.0	< 0.005	< 0.005	0.02	75.4
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	250	550	250	—	—	100	—	—	55.0	—	—	—	—	—	—	—

Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	250	550	250	—	—	100	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	13.7	40.0	100	40.0	—	—	15.0	—	—	10.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.74	22.5	5.72	7.72	0.01	0.26	0.15	0.39	0.24	0.03	0.27	—	1,499	1,499	0.06	0.02	0.70	1,508
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.74	0.62	5.73	7.64	0.01	0.26	0.57	0.81	0.24	0.07	0.29	—	1,491	1,491	0.06	0.02	0.02	1,499
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.23	0.51	1.79	2.38	< 0.005	0.08	0.04	0.12	0.07	0.01	0.08	—	453	453	0.02	0.01	0.09	455
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.04	0.09	0.33	0.43	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.02	—	75.0	75.0	< 0.005	< 0.005	0.02	75.4

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	31.7	31.5	0.93	41.8	0.08	5.21	0.56	5.77	5.19	0.14	5.33	565	1,086	1,651	1.50	0.07	2.56	1,712
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	31.6	31.4	0.95	40.6	0.07	5.21	0.56	5.77	5.19	0.14	5.33	565	1,054	1,618	1.50	0.07	0.18	1,678
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.49	7.72	0.47	11.7	0.02	1.18	0.52	1.70	1.17	0.13	1.30	134	848	982	1.10	0.04	1.12	1,023
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.37	1.41	0.09	2.14	< 0.005	0.21	0.10	0.31	0.21	0.02	0.24	22.2	140	163	0.18	0.01	0.19	169
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	250	550	250	—	—	100	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	75.0	250	550	250	—	—	100	—	—	55.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Threshold	—	13.7	40.0	100	40.0	—	—	15.0	—	—	10.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.48	0.44	0.29	2.92	0.01	0.01	0.56	0.56	< 0.005	0.14	0.15	—	671	671	0.03	0.03	2.44	682
Area	31.2	31.1	0.61	38.9	0.07	5.21	—	5.21	5.18	—	5.18	555	235	790	0.51	0.04	—	815
Energy	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	173	173	0.01	< 0.005	—	174
Water	—	—	—	—	—	—	—	—	—	—	—	1.35	7.51	8.85	0.14	< 0.005	—	13.3
Waste	—	—	—	—	—	—	—	—	—	—	—	8.00	0.00	8.00	0.80	0.00	—	28.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Total	31.7	31.5	0.93	41.8	0.08	5.21	0.56	5.77	5.19	0.14	5.33	565	1,086	1,651	1.50	0.07	2.56	1,712
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.47	0.43	0.32	2.79	0.01	0.01	0.56	0.56	< 0.005	0.14	0.15	—	641	641	0.04	0.03	0.06	651
Area	31.1	31.0	0.60	37.8	0.07	5.21	—	5.21	5.18	—	5.18	555	232	787	0.51	0.04	—	812
Energy	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	173	173	0.01	< 0.005	—	174
Water	—	—	—	—	—	—	—	—	—	—	—	1.35	7.51	8.85	0.14	< 0.005	—	13.3
Waste	—	—	—	—	—	—	—	—	—	—	—	8.00	0.00	8.00	0.80	0.00	—	28.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Total	31.6	31.4	0.95	40.6	0.07	5.21	0.56	5.77	5.19	0.14	5.33	565	1,054	1,618	1.50	0.07	0.18	1,678
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.44	0.40	0.30	2.64	0.01	0.01	0.52	0.53	< 0.005	0.13	0.14	—	614	614	0.03	0.03	1.00	624

Area	7.04	7.32	0.14	9.05	0.02	1.17	—	1.17	1.16	—	1.16	125	53.5	178	0.12	0.01	—	184
Energy	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	173	173	0.01	< 0.005	—	174
Water	—	—	—	—	—	—	—	—	—	—	—	1.35	7.51	8.85	0.14	< 0.005	—	13.3
Waste	—	—	—	—	—	—	—	—	—	—	—	8.00	0.00	8.00	0.80	0.00	—	28.0
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Total	7.49	7.72	0.47	11.7	0.02	1.18	0.52	1.70	1.17	0.13	1.30	134	848	982	1.10	0.04	1.12	1,023
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.08	0.07	0.05	0.48	< 0.005	< 0.005	0.10	0.10	< 0.005	0.02	0.02	—	102	102	0.01	< 0.005	0.17	103
Area	1.29	1.34	0.03	1.65	< 0.005	0.21	—	0.21	0.21	—	0.21	20.7	8.86	29.5	0.02	< 0.005	—	30.4
Energy	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.7	28.7	< 0.005	< 0.005	—	28.8
Water	—	—	—	—	—	—	—	—	—	—	—	0.22	1.24	1.47	0.02	< 0.005	—	2.20
Waste	—	—	—	—	—	—	—	—	—	—	—	1.32	0.00	1.32	0.13	0.00	—	4.63
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	1.37	1.41	0.09	2.14	< 0.005	0.21	0.10	0.31	0.21	0.02	0.24	22.2	140	163	0.18	0.01	0.19	169

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.61	0.51	4.69	5.79	0.01	0.19	—	0.19	0.17	—	0.17	—	852	852	0.03	0.01	—	855

Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.16	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	23.3	23.3	< 0.005	< 0.005	—	23.4
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.87	3.87	< 0.005	< 0.005	—	3.88
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.43	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	91.3	91.3	< 0.005	< 0.005	0.01	92.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.53	2.53	< 0.005	< 0.005	< 0.005	2.56
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.42	0.42	< 0.005	< 0.005	< 0.005	0.42	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

3.3. Site Preparation (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.50	4.60	5.56	0.01	0.24	—	0.24	0.22	—	0.22	—	858	858	0.03	0.01	—	861
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.35	2.35	< 0.005	< 0.005	—	2.36
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	0.39	0.39	< 0.005	< 0.005	—	0.39
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	45.7	45.7	< 0.005	< 0.005	0.01	46.3	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.13	0.13	< 0.005	< 0.005	< 0.005	0.13	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	0.56	5.60	6.98	0.01	0.26	—	0.26	0.23	—	0.23	—	1,305	1,305	0.05	0.01	—	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.67	0.56	5.60	6.98	0.01	0.26	—	0.26	0.23	—	0.23	—	1,305	1,305	0.05	0.01	—	1,309
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.53	1.91	< 0.005	0.07	—	0.07	0.06	—	0.06	—	357	357	0.01	< 0.005	—	359
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.28	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	59.2	59.2	< 0.005	< 0.005	—	59.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.71	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	139	139	0.01	0.01	0.56	142
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	54.5	54.5	< 0.005	0.01	0.14	56.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.62	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	132	132	0.01	0.01	0.01	133
Vendor	< 0.005	< 0.005	0.08	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	54.5	54.5	< 0.005	0.01	< 0.005	56.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.17	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	36.4	36.4	< 0.005	< 0.005	0.07	36.9
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.9	14.9	< 0.005	< 0.005	0.02	15.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.02	6.02	< 0.005	< 0.005	0.01	6.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.47	2.47	< 0.005	< 0.005	< 0.005	2.58
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Paving (2024) - Unmitigated

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

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

Off-Road Equipment	0.63	0.53	4.52	5.32	0.01	0.21	—	0.21	0.19	—	0.19	—	823	823	0.03	0.01	—	826
Paving	—	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.3	11.3	< 0.005	< 0.005	—	11.3
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.87	1.87	< 0.005	< 0.005	—	1.87
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.86	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	169	169	0.01	0.01	0.68	172
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.21	2.21	< 0.005	< 0.005	< 0.005	2.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.37	0.37	< 0.005	< 0.005	< 0.005	0.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Architectural Coating (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	22.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.83	1.83	< 0.005	< 0.005	—	1.84
Architectural Coatings	—	0.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30	0.30	< 0.005	< 0.005	—	0.30	
Architectural Coatings	—	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	27.9	27.9	< 0.005	< 0.005	0.11	28.3	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.36	0.36	< 0.005	< 0.005	< 0.005	0.37	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06	
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.48	0.44	0.29	2.92	0.01	0.01	0.56	0.56	< 0.005	0.14	0.15	—	671	671	0.03	0.03	2.44	682
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.48	0.44	0.29	2.92	0.01	0.01	0.56	0.56	< 0.005	0.14	0.15	—	671	671	0.03	0.03	2.44	682
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.47	0.43	0.32	2.79	0.01	0.01	0.56	0.56	< 0.005	0.14	0.15	—	641	641	0.04	0.03	0.06	651
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.47	0.43	0.32	2.79	0.01	0.01	0.56	0.56	< 0.005	0.14	0.15	—	641	641	0.04	0.03	0.06	651
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.08	0.07	0.05	0.48	< 0.005	< 0.005	0.10	0.10	< 0.005	0.02	0.02	—	102	102	0.01	< 0.005	0.17	103
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Total	0.08	0.07	0.05	0.48	< 0.005	< 0.005	0.10	0.10	< 0.005	0.02	0.02	—	102	102	0.01	< 0.005	0.17	103
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4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	100	100	0.01	< 0.005	—	101
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	27.4	27.4	< 0.005	< 0.005	—	27.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	128	128	0.01	< 0.005	—	128
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	100	100	0.01	< 0.005	—	101
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	27.4	27.4	< 0.005	< 0.005	—	27.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	128	128	0.01	< 0.005	—	128
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	16.6	16.6	< 0.005	< 0.005	—	16.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	4.54	4.54	< 0.005	< 0.005	—	4.56
Total	—	—	—	—	—	—	—	—	—	—	—	—	21.1	21.1	< 0.005	< 0.005	—	21.2

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	45.4	45.4	< 0.005	< 0.005	—	45.5
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	45.4	45.4	< 0.005	< 0.005	—	45.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	45.4	45.4	< 0.005	< 0.005	—	45.5
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	45.4	45.4	< 0.005	< 0.005	—	45.5
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.51	7.51	< 0.005	< 0.005	—	7.53
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.51	7.51	< 0.005	< 0.005	—	7.53

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	31.1	30.6	0.60	37.8	0.07	5.21	—	5.21	5.18	—	5.18	555	232	787	0.51	0.04	—	812
Consumer Products	—	0.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.11	0.10	0.01	1.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.03	3.03	< 0.005	< 0.005	—	3.04
Total	31.2	31.1	0.61	38.9	0.07	5.21	—	5.21	5.18	—	5.18	555	235	790	0.51	0.04	—	815
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	31.1	30.6	0.60	37.8	0.07	5.21	—	5.21	5.18	—	5.18	555	232	787	0.51	0.04	—	812
Consumer Products	—	0.36	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	31.1	31.0	0.60	37.8	0.07	5.21	—	5.21	5.18	—	5.18	555	232	787	0.51	0.04	—	812
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	1.28	1.25	0.02	1.55	< 0.005	0.21	—	0.21	0.21	—	0.21	20.7	8.61	29.3	0.02	< 0.005	—	30.2

Consumer Products	—	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	0.01	< 0.005	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.25	0.25	< 0.005	< 0.005	—	0.25
Total	1.29	1.34	0.03	1.65	< 0.005	0.21	—	0.21	0.21	—	0.21	20.7	8.86	29.5	0.02	< 0.005	—	30.4

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1.35	7.51	8.85	0.14	< 0.005	—	13.3
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	1.35	7.51	8.85	0.14	< 0.005	—	13.3										
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1.35	7.51	8.85	0.14	< 0.005	—	13.3

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.35	7.51	8.85	0.14	< 0.005	—	13.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	0.22	1.24	1.47	0.02	< 0.005	—	2.20
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.22	1.24	1.47	0.02	< 0.005	—	2.20

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	8.00	0.00	8.00	0.80	0.00	—	—	28.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	8.00	0.00	8.00	0.80	0.00	—	—	28.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	8.00	0.00	8.00	0.80	0.00	—	—	28.0

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	8.00	0.00	8.00	0.80	0.00	—	28.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	1.32	0.00	1.32	0.13	0.00	—	4.63
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1.32	0.00	1.32	0.13	0.00	—	4.63

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12	0.12
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/2/2024	1/16/2024	5.00	10.0	—
Site Preparation	Site Preparation	1/17/2024	1/18/2024	5.00	1.00	—
Building Construction	Building Construction	1/22/2024	6/10/2024	5.00	100	—
Paving	Paving	6/11/2024	6/18/2024	5.00	5.00	—

Architectural Coating	Architectural Coating	6/19/2024	6/26/2024	5.00	5.00	—
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5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	1.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	2.00	6.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	4.00	367	0.29
Building Construction	Forklifts	Diesel	Average	2.00	6.00	82.0	0.20
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	4.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	7.00	81.0	0.42
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	7.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	10.0	12.0	LDA,LDT1,LDT2
Demolition	Vendor	—	7.63	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	5.00	12.0	LDA,LDT1,LDT2
Site Preparation	Vendor	—	7.63	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	14.4	12.0	LDA,LDT1,LDT2
Building Construction	Vendor	2.14	7.63	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	17.5	12.0	LDA,LDT1,LDT2
Paving	Vendor	—	7.63	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	2.88	12.0	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	7.63	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	34,192	11,397	0.00	0.00	1,270

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	—
Site Preparation	—	—	0.50	0.00	—
Paving	0.00	0.00	0.00	0.00	0.49

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%
Parking Lot	0.49	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	540	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	109	98.2	81.8	37,751	790	713	594	274,013
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	7
Gas Fireplaces	11
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	2
Conventional Wood Stoves	0
Catalytic Wood Stoves	1
Non-Catalytic Wood Stoves	1
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
34192.125	11,397	0.00	0.00	1,270

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	67,817	540	0.0330	0.0040	141,569
Parking Lot	18,545	540	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	702,662	54,795
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	14.8	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

8. User Changes to Default Data

Screen	Justification
Land Use	Lot average adjusted as site is approx. 0.69 acres. Building area SF adjusted to current estimated existing building size.
Construction: Construction Phases	No grading as site is existing medical office building with parking lot being renovated to MFR.

APPENDIX – B
Emfac & Fuel Use Calculations

EMFAC2021-EI-2007Class-San Diego-2024-Annual-20231116164800

Source: EMFAC2021 (v1.0.2) Emissions Inventory												
Region Type: Sub-Area												
Region: San Diego												
Calendar Year: 2024												
Season: Annual												
Vehicle Classification: EMFAC2007 Categories												
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption												
Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	Fuel Consumption	Total VMT	Total Fuel	Miles Per Gallon	
San Diego	2024	HHDT	Aggregate	Aggregate	Gasoline	8.191687392	492.454592	0.135558299	1934574.872	332093.3955	5.825393994	
San Diego	2024	HHDT	Aggregate	Aggregate	Diesel	14731.683635393200	1859684.6678550600	317.7018708				
San Diego	2024	HHDT	Aggregate	Aggregate	Electricity	45.3152396063093	4872.6026485109800	0				
San Diego	2024	HHDT	Aggregate	Aggregate	Natural Gas	1074.442881015280	69525.14658815420	14.2559664				
San Diego	2024	LDA	Aggregate	Aggregate	Gasoline	1175418.4593909600	46842647.47383250	1662.787767	51672446.94	1695205.087	30.48153132	
San Diego	2024	LDA	Aggregate	Aggregate	Diesel	5631.047063191570	172212.5896148540	4.319999021				
San Diego	2024	LDA	Aggregate	Aggregate	Electricity	63266.94036460030	3105099.5837988700	0				
San Diego	2024	LDA	Aggregate	Aggregate	Plug-in Hybrid	32449.086099468700	1552287.290247810	28.09732078				
San Diego	2024	LDT1	Aggregate	Aggregate	Gasoline	129009.47894742700	4429822.548349840	191.4651398	4448573	191618.635	23.21576396	
San Diego	2024	LDT1	Aggregate	Aggregate	Diesel	60.94873199	887.9331638475880	0.039474197				
San Diego	2024	LDT1	Aggregate	Aggregate	Electricity	244.5610238	10901.462360249900	0				
San Diego	2024	LDT1	Aggregate	Aggregate	Plug-in Hybrid	133.7236371	6961.056324144920	0.114021053				
San Diego	2024	LDT2	Aggregate	Aggregate	Gasoline	556633.3556886660	22430753.470223800	991.40203	22829239.43	997723.8918	22.88131979	
San Diego	2024	LDT2	Aggregate	Aggregate	Diesel	2078.6082683537600	87677.92126660400	2.93101705				
San Diego	2024	LDT2	Aggregate	Aggregate	Electricity	2965.0925027544000	113303.39875277100	0				
San Diego	2024	LDT2	Aggregate	Aggregate	Plug-in Hybrid	3943.0582444149100	197504.63964740340	3.390844726				
San Diego	2024	LHDT1	Aggregate	Aggregate	Gasoline	42013.60567855620	1671762.2229034000	172.8674945	2878002.4622779600	247169.8777	11.64382363	
San Diego	2024	LHDT1	Aggregate	Aggregate	Diesel	30083.46369024650	1194852.7544577400	74.30238324				
San Diego	2024	LHDT1	Aggregate	Aggregate	Electricity	144.7508655372090	11387.484916819800	0				
San Diego	2024	LHDT2	Aggregate	Aggregate	Gasoline	5983.018213745720	231444.19728125000	26.98225132	717485.913080209000	63225.95693	11.34796447	
San Diego	2024	LHDT2	Aggregate	Aggregate	Diesel	11684.105473453700	483249.1015995410	36.24370561				
San Diego	2024	LHDT2	Aggregate	Aggregate	Electricity	37.4660505	2792.6141994178000	0				
San Diego	2024	MCY	Aggregate	Aggregate	Gasoline	70199.56619214500	430235.85799092500	11.02982364	430235.857990925000	11029.82364	39.0065945	
San Diego	2024	MDV	Aggregate	Aggregate	Gasoline	333953.2217649990	13160207.106575400	707.062898	13641622.3060350000	719693.5197	18.95476607	
San Diego	2024	MDV	Aggregate	Aggregate	Diesel	5837.038819864120	235562.30847777700	10.45956853				
San Diego	2024	MDV	Aggregate	Aggregate	Electricity	3228.869596512250	123365.15352744800	0				
San Diego	2024	MDV	Aggregate	Aggregate	Plug-in Hybrid	2430.386414065170	122487.73445434300	2.171053211				
San Diego	2024	MH	Aggregate	Aggregate	Gasoline	10135.554587203700	93222.2888491514	21.13678274	132824.1960752300000	25355.08113	5.238563244	
San Diego	2024	MH	Aggregate	Aggregate	Diesel	4094.6196479614300	39601.9072260787	4.218298391				
San Diego	2024	MHDT	Aggregate	Aggregate	Gasoline	3473.007275085210	196459.38981480900	41.45910634	962526.7276001540	132018.9544	7.290822233	
San Diego	2024	MHDT	Aggregate	Aggregate	Diesel	17479.190946328800	748443.107725747	88.58979522				
San Diego	2024	MHDT	Aggregate	Aggregate	Electricity	56.78967375	3311.0551823520500	0				
San Diego	2024	MHDT	Aggregate	Aggregate	Natural Gas	322.18244	14313.174877245600	1.970052797				
San Diego	2024	OBUS	Aggregate	Aggregate	Gasoline	1164.5171515275100	56792.68215845070	11.88069266	110158.1042574920000	19693.32536	5.593677159	
San Diego	2024	OBUS	Aggregate	Aggregate	Diesel	595.4995039316600	47363.048955287200	7.009053046				
San Diego	2024	OBUS	Aggregate	Aggregate	Electricity	2.222469648	219.6377738889730	0				
San Diego	2024	OBUS	Aggregate	Aggregate	Natural Gas	93.90306301	5782.735369865350	0.803579657				
San Diego	2024	SBUS	Aggregate	Aggregate	Gasoline	272.9945972	15743.272214665100	1.588112369	61754.0717716628000	7261.004003	8.50489433	
San Diego	2024	SBUS	Aggregate	Aggregate	Diesel	2130.750933048820	45339.05249518580	5.595751568				
San Diego	2024	SBUS	Aggregate	Aggregate	Electricity	7.190218958	213.5607268	0				
San Diego	2024	SBUS	Aggregate	Aggregate	Natural Gas	17.70253776	458.1863350076500	0.077140066				
San Diego	2024	UBUS	Aggregate	Aggregate	Gasoline	135.2334330044850	13564.697972002200	1.570833898	126624.340094314000	22195.45749	5.704966439	
San Diego	2024	UBUS	Aggregate	Aggregate	Electricity	25.45475467	3155.442087844260	0				
San Diego	2024	UBUS	Aggregate	Aggregate	Natural Gas	894.3814307	109904.20003446800	20.62462359				