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M E M O

Date: Revised October 27, 2022

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From: James A. Reyff
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RE: Madera Multifamily Project – San Jose, CA

SUBJECT: Update to Air Quality and GHG Analysis Job#20-122/22-073

This memo addresses changes to the air quality analysis prepared by Illingworth & Rodkin, Inc. in 2020 for the Madera Multifamily Project[1]. The 2020 air quality study predicted both construction and operational emissions associated with the project and health risks that the project may cause to nearby sensitive receptors. The analysis evaluated demolition of the existing structures on a 0.68-acre site, construction of an 8-story apartment building with 184 dwelling units, amenities and parking for 140 vehicles. Total building square footage was 199,111 sf building space and 19,459 sf parking. The air quality and greenhouse gas (GHG) analysis found that emissions associated with the Project (both construction and operation) were below levels considered significant. Localized impacts from Project construction were found to be significant; however, those impacts could be reduced to less-than-significant levels with mitigation.

The Project has been modified and now includes 272 multi-family units along with 167 parking spaces using parking stackers, along with building amenities. While the building size is not that much different than previously proposed, the project would accommodate more residences and potentially produce greater emissions. Construction activity involving diesel equipment

[1] Illingworth & Rodkin, Inc. 2020. *Madera Multifamily Development Air Quality and Greenhouse Gas Emission Assessment*. November.

associated with the currently proposed project (Updated Project) is not anticipated to be substantially different than the previously studied project (Original Project). While the Updated Project includes more residential units and parking spaces, overall construction activity in terms of demolition, earthwork, and building construction would be similar.

The latest version of the online CalEEMod model (2022 version) was used to predict emissions from the Updated Project and compare those to the Original Project previously assessed for air quality impacts[2]. Inputs to the model included the new size of the Updated Project and updated traffic information. Modeling results are presented in Table 1. CalEEMod modeling output is provided as Attachment 1.

Table 1. Operational Period Emissions (2020 Project and 2022 Project)

Scenario	ROG	NOx	PM_{10}	$PM_{2.5}$	CO2e
Original 2024 Annual Project Emissions	1.22 tons	0.49 tons	0.64 tons	0.19 tons	714 Mtons
Updated 2025 Annual Project Emissions	1.62 tons	0.45 tons	0.25 tons	0.05 tons	877 Mtons
BAAQMD Thresholds (tons /year)	*10 tons*	*10 tons*	*15 tons*	*10 tons*	--[2]
Exceed Threshold?	*No*	*No*	*No*	*No*	*No*[2]
Original 2024 Daily Emissions [1]	6.7lb/day	2.7 lb/day	3.5 lb/day	1.0 lb/day	--
Updated 2025 Daily Emissions [1]	8.9 lb/day	2.5 lb/day	1.4 lb/day	0.3 lb/day	--
BAAQMD Thresholds (pounds/day)	*54* lbs.	*54* lbs.	*82* lbs.	*54* lbs.	--
Exceed Threshold?	*No*	*No*	*No*	*No*	--
Notes: [1]Assumes 365-day operation. [2]Project in Transit District and compliant with City's GHGRS					

Operational emissions from the Updated Project are generally similar to that of the Original Project emissions. Differences are caused by the change in size of the Project, use of the newer updated CalEEMod modeling that incorporates vehicle miles travelled data and newer traffic data. Emissions under the Updated Project would not exceed any significance thresholds. While operational GHG emissions are slightly higher, the per capita emissions would be slightly lower. Assuming a rate of 3.19 persons per household (used in the original study based on CA Department of Finance estimates), the Updated Project would include 868 persons and 1.0 metric tons (Mton) per capita per year. The Original Project had 1.1 Mton per capita per year.

In summary, the Updated Project is anticipated to have similar operational air quality impacts as the original Project that was evaluated in 2020. Updates to the construction modeling were not made because construction assumptions are not anticipated to change much. At least not in a manner that would increase emissions and cause new impacts that require additional mitigation measures. The project site acreage and building size are similar to those modeled for the Original Project. The mitigated impact under the Original Project was predicted to be about 30 percent of the threshold with mitigation. So even if construction increases under the Updated Project, impacts would be less that significant with mitigation.

[2] See https://www.caleemod.com/

Madera Multifamily v2 Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Madera Multifamily v2
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	1.60
Location	486 W San Carlos St, San Jose, CA 95110, USA
County	Santa Clara
City	San Jose
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1845
EDFZ	1
Electric Utility	San Jose Clean Energy
Gas Utility	Pacific Gas & Electric

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
Apartments Mid Rise	272	Dwelling Unit	1.00	199,111	10,000	0.00	813	main project
Enclosed Parking with Elevator	167	Space	0.00	19,459	0.00	0.00	—	parking

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

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	2.98	2.81	1.61	17.2	0.04	0.02	1.28	1.30	0.02	0.22	0.25	—	3,675	3,675	0.20	0.16	14.1	3,743
Area	1.61	7.00	0.16	16.2	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	44.7	44.7	< 0.005	< 0.005	—	44.9
Energy	0.07	0.04	0.60	0.26	< 0.005	0.05	—	0.05	0.05	—	0.05	—	1,220	1,220	0.15	0.01	—	1,228
Water	—	—	—	—	—	—	—	—	—	—	—	18.9	31.5	50.4	1.94	0.05	—	113
Waste	—	—	—	—	—	—	—	—	—	—	—	108	0.00	108	10.8	0.00	—	379
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.43	1.43
Total	4.66	9.84	2.37	33.7	0.04	0.08	1.28	1.36	0.08	0.22	0.31	127	4,971	5,098	13.1	0.22	15.6	5,508
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.84	2.66	1.89	17.1	0.03	0.02	1.28	1.30	0.02	0.22	0.25	—	3,459	3,459	0.23	0.18	0.37	3,519
Area	0.00	5.47	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.07	0.04	0.60	0.26	< 0.005	0.05	—	0.05	0.05	—	0.05	—	1,220	1,220	0.15	0.01	—	1,228
Water	—	—	—	—	—	—	—	—	—	—	—	18.9	31.5	50.4	1.94	0.05	—	113
Waste	—	—	—	—	—	—	—	—	—	—	—	108	0.00	108	10.8	0.00	—	379
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.43	1.43
Total	2.92	8.16	2.49	17.4	0.04	0.07	1.28	1.35	0.07	0.22	0.30	127	4,711	4,838	13.2	0.24	1.79	5,240

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.80	2.63	1.77	16.3	0.03	0.02	1.28	1.30	0.02	0.22	0.25	—	3,488	3,488	0.22	0.17	6.10	3,551
Area	0.80	6.22	0.08	8.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	22.1	22.1	< 0.005	< 0.005	—	22.1
Energy	0.07	0.04	0.60	0.26	< 0.005	0.05	—	0.05	0.05	—	0.05	—	1,220	1,220	0.15	0.01	—	1,228
Water	—	—	—	—	—	—	—	—	—	—	—	18.9	31.5	50.4	1.94	0.05	—	113
Waste	—	—	—	—	—	—	—	—	—	—	—	108	0.00	108	10.8	0.00	—	379
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.43	1.43
Total	3.67	8.88	2.46	24.5	0.04	0.08	1.28	1.35	0.08	0.22	0.30	127	4,762	4,889	13.1	0.23	7.53	5,295
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.51	0.48	0.32	2.97	0.01	< 0.005	0.23	0.24	< 0.005	0.04	0.05	—	577	577	0.04	0.03	1.01	588
Area	0.15	1.14	0.01	1.46	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	3.65	3.65	< 0.005	< 0.005	—	3.67
Energy	0.01	0.01	0.11	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	202	202	0.03	< 0.005	—	203
Water	—	—	—	—	—	—	—	—	—	—	—	3.13	5.21	8.34	0.32	0.01	—	18.7
Waste	—	—	—	—	—	—	—	—	—	—	—	17.9	0.00	17.9	1.79	0.00	—	62.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.24	0.24
Total	0.67	1.62	0.45	4.48	0.01	0.01	0.23	0.25	0.01	0.04	0.05	21.1	788	809	2.18	0.04	1.25	877

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartme Mid Rise	2.98	2.81	1.61	17.2	0.04	0.02	0.20	0.22	0.02	0.06	0.08	—	3,675	3,675	0.20	0.16	14.1	3,743
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	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	2.98	2.81	1.61	17.2	0.04	0.02	0.20	0.22	0.02	0.06	0.08	—	3,675	3,675	0.20	0.16	14.1	3,743
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	2.84	2.66	1.89	17.1	0.03	0.02	0.20	0.22	0.02	0.06	0.08	—	3,459	3,459	0.23	0.18	0.37	3,519
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	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	2.84	2.66	1.89	17.1	0.03	0.02	0.20	0.22	0.02	0.06	0.08	—	3,459	3,459	0.23	0.18	0.37	3,519
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartme nts Mid Rise	0.51	0.48	0.32	2.97	0.01	< 0.005	0.04	0.04	< 0.005	0.01	0.02	—	577	577	0.04	0.03	1.01	588
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	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	0.51	0.48	0.32	2.97	0.01	< 0.005	0.04	0.04	< 0.005	0.01	0.02	—	577	577	0.04	0.03	1.01	588

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	—	—	—	—	—	—	—	—	—	—	—	—	453	453	0.08	0.01	—	458
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.30	0.30	< 0.005	< 0.005	—	0.30
Total	—	—	—	—	—	—	—	—	—	—	—	—	453	453	0.08	0.01	—	458
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	453	453	0.08	0.01	—	458
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.30	0.30	< 0.005	< 0.005	—	0.30
Total	—	—	—	—	—	—	—	—	—	—	—	—	453	453	0.08	0.01	—	458
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	74.9	74.9	0.01	< 0.005	—	75.8
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05	< 0.005	< 0.005	—	0.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	75.0	75.0	0.01	< 0.005	—	75.8

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.07	0.04	0.60	0.26	< 0.005	0.05	—	0.05	0.05	—	0.05	—	767	767	0.07	< 0.005	—	770
Enclosed Parking with Elevator	0.00	0.00	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	0.07	0.04	0.60	0.26	< 0.005	0.05	—	0.05	0.05	—	0.05	—	767	767	0.07	< 0.005	—	770
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.07	0.04	0.60	0.26	< 0.005	0.05	—	0.05	0.05	—	0.05	—	767	767	0.07	< 0.005	—	770
Enclosed Parking with Elevator	0.00	0.00	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	0.07	0.04	0.60	0.26	< 0.005	0.05	—	0.05	0.05	—	0.05	—	767	767	0.07	< 0.005	—	770
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.01	0.01	0.11	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	127	127	0.01	< 0.005	—	127
Enclosed Parking with Elevator	0.00	0.00	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	0.01	0.01	0.11	0.05	< 0.005	0.01	—	0.01	0.01	—	0.01	—	127	127	0.01	< 0.005	—	127

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	4.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.61	1.53	0.16	16.2	< 0.005	0.01	—	0.01	0.01	—	0.01	—	44.7	44.7	< 0.005	< 0.005	—	44.9
Total	1.61	7.00	0.16	16.2	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	44.7	44.7	< 0.005	< 0.005	—	44.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	—	4.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	5.47	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Consum Products	—	0.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.15	0.14	0.01	1.46	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.65	3.65	< 0.005	< 0.005	—	3.67
Total	0.15	1.14	0.01	1.46	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	3.65	3.65	< 0.005	< 0.005	—	3.67

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	18.9	31.5	50.4	1.94	0.05	—	113
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	18.9	31.5	50.4	1.94	0.05	—	113
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	18.9	31.5	50.4	1.94	0.05	—	113

Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	18.9	31.5	50.4	1.94	0.05	—	113
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	3.13	5.21	8.34	0.32	0.01	—	18.7
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	3.13	5.21	8.34	0.32	0.01	—	18.7

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	108	0.00	108	10.8	0.00	—	379
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	108	0.00	108	10.8	0.00	—	379

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	108	0.00	108	10.8	0.00	—	379
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	108	0.00	108	10.8	0.00	—	379
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	17.9	0.00	17.9	1.79	0.00	—	62.8
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	17.9	0.00	17.9	1.79	0.00	—	62.8

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.43	1.43
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.43	1.43

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.43	1.43
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.43	1.43
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.24	0.24
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.24	0.24

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	897	897	897	327,361	4,650	4,650	4,650	1,697,089
Enclosed Parking with Elevator	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	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	272
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
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)
528768	176,256	103,146	34,382	3,928

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	927,915	178	0.0330	0.0040	2,394,707
Enclosed Parking with Elevator	616	178	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	9,864,461	130,661
Enclosed Parking with Elevator	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	67.3	0.00
Enclosed Parking with Elevator	0.00	0.00