

APPENDIX B:
AIR QUALITY AND GREENHOUSE
GAS EMISSIONS



MEMORANDUM

To: Gian Martire, Senior Planner, City of Cupertino
From: Ace Malisos, Air Quality and Noise Manager, Kimley-Horn
Noemi Wyss AICP, Environmental Analyst, Kimley-Horn
Date: April 2, 2020
Subject: Westport Mixed-Use Project – Alternative Proposal Comparison: Air Quality and Greenhouse Gas Emissions

1.0 PURPOSE

The purpose of this memorandum is to identify the air quality and greenhouse gas (GHG) emissions associated with operations of the Westport Mixed-Use Project (project) Alternative Proposal, located in the City of Cupertino, California. This comparative analysis has been undertaken to analyze whether the Alternative Proposal would result in any new or substantially more severe significant environmental impacts as compared to the conclusions discussed in the certified Draft Environmental Impact Report (EIR) for the Westport Mixed-Use Project.

2.0 PROPOSED PROJECT DESCRIPTION

The proposed Project is in the City of Cupertino (City) in Santa Clara County, California. The project is located adjacent to SR-85 and Stevens Creek Boulevard on approximately 8.1 acres. The existing site is 71,254 square feet of shopping center use (The Oaks), which includes specialty restaurants, retailers, and other commercial space.

The Alternative Proposal would demolish the existing buildings and construct a mixed-use urban village with 88 low-rise multifamily residential units, 39 senior residential units, 140 assisted living units, and 27 life guidance/memory care units, 8,040 square feet of general retail and 2,140 square feet of medical office. The follow section provides a comparison between the original proposal and the alternative proposal, based on the March 17, 2020 site plans.

3.0 Air Quality

Construction Emissions

Construction associated with the Alternative Proposal would result in less building area than what was analyzed with the proposed project in the Draft EIR. Therefore, construction emissions would be the same or less than the emissions associated with the proposed project.

Operational Emissions

Operational emissions for mixed-use developments are typically generated from mobile sources (burning of fossil fuels in cars); energy sources (cooling, heating, and cooking); and area sources (landscape equipment and household products). **Table 1: Operational Emissions (Alternative Proposal)** shows that the Alternative Proposal's annual and daily emissions would not exceed BAAQMD operational thresholds.

Table 1: Operational Emissions (Alternative Proposal)

Emission Source	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Exhaust		Fugitive	
			Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})
Annual Emissions (maximum tons per year)						
Area Source Emissions	1.96	0.03	0.01	0.01	--	--
Energy Emissions	0.02	0.14	0.01	0.01	--	--
Mobile Emissions ¹	0.43	1.83	0.02	0.02	1.47	0.39
Total Project Emissions	2.40	2.01	0.04	0.04	1.47	0.39
<i>BAAQMD Threshold¹</i>	<i>10</i>	<i>10</i>	<i>15</i>	<i>10</i>	<i>N/A</i>	<i>N/A</i>
Is Threshold Exceeded?	No	No	No	No	N/A	N/A
Average Daily Emissions (pounds)						
Area Source Emissions	10.75	0.19	0.07	0.07	--	--
Energy Emissions	0.09	0.77	0.06	0.06	--	--
Mobile Emissions ¹	2.34	10.04	0.09	0.09	8.05	2.16
Total Project Emissions	13.17	11.01	0.22	0.22	8.05	2.16
<i>BAAQMD Threshold²</i>	<i>54</i>	<i>54</i>	<i>82</i>	<i>54</i>	<i>N/A</i>	<i>N/A</i>
Is Threshold Exceeded?	No	No	No	No	N/A	N/A
Notes: 1. Mobile emissions conservatively represent emissions associated with the full project (i.e., 1,462 daily vehicle trips), and do not take credit/trip reductions for the existing uses. 2. Bay Area Air Quality Management District, <i>California Environmental Quality Act Air Quality Guidelines</i> , 2017. Source: Refer to the CalEEMod outputs provided in Appendix A, <i>Air Quality Modeling Data</i> .						

Table 2: Operational Emissions (Original Proposal) shows the operational air quality emissions associated with the original proposal as analyzed in the Draft EIR. The project's annual and daily emissions would not exceed BAAQMD operational thresholds.

Table 2: Operational Emissions (Original Proposal)

Emission Source	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Exhaust		Fugitive	
			Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})
Annual Emissions (maximum tons per year)						
Area Source Emissions	2.39	0.03	0.04	0.04	--	--
Energy Emissions	0.01	0.11	0.01	0.01	--	--
Mobile Emissions ¹	0.55	2.24	0.02	0.02	1.61	0.43
Total Project Unmitigated Emissions	2.96	2.38	0.07	0.06	1.61	0.43
<i>BAAQMD Threshold¹</i>	<i>10</i>	<i>10</i>	<i>15</i>	<i>10</i>	<i>N/A</i>	<i>N/A</i>
Is Threshold Exceeded?	No	No	No	No	N/A	N/A
Average Daily Emissions (pounds)						
Area Source Emissions	13.09	0.15	0.21	0.21	--	--
Energy Emissions	0.07	0.59	0.05	0.05	--	--
Mobile Emissions ¹	3.04	12.27	0.10	0.10	8.84	2.37
Total Project Unmitigated Emissions	16.20	13.02	0.36	0.36	8.84	2.37
<i>BAAQMD Threshold²</i>	<i>54</i>	<i>54</i>	<i>82</i>	<i>54</i>	<i>N/A</i>	<i>N/A</i>
Is Threshold Exceeded?	No	No	No	No	N/A	N/A
Notes: 1. Mobile emissions conservatively represent emissions associated with the full project (i.e., 2,174 daily vehicle trips), and do not take credit/trip reductions for the existing uses. 2. Bay Area Air Quality Management District, <i>California Environmental Quality Act Air Quality Guidelines</i> , 2017. Source: Refer to the CalEEMod outputs provided in Appendix A, <i>Air Quality Modeling Data</i> .						

Table 3: Operational Air Quality Comparison shows a comparison between the original project and the Alternative Proposal. The Alternative Proposal would have less emissions than the original project that was analyzed in the Draft EIR.

Table 3: Operational Air Quality Comparison

Emission Source	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Exhaust		Fugitive	
			Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})
Annual Emissions (maximum tons per year)						
Total Project Emissions (Alternative)	2.40	2.01	0.04	0.04	1.47	0.39
Total Project Emissions (Original)	2.96	2.38	0.07	0.06	1.61	0.43
Net Change	-0.56	-0.37	-0.03	-0.02	-0.14	-0.04
Average Daily Emissions (pounds)						
Total Project Emissions (Alternative)	13.17	11.01	0.22	0.22	8.05	2.16
Total Project Emissions (Original)	16.20	13.02	0.36	0.36	8.84	2.37
Net Change	-3.03	-2.01	-0.14	-0.14	-0.79	-0.21
Notes:						
1. Bay Area Air Quality Management District, <i>California Environmental Quality Act Air Quality Guidelines</i> , 2017.						
Source: Refer to the CalEEMod outputs provided in Appendix A, <i>Air Quality Modeling Data</i> .						

4.0 Greenhouse Gas Emissions

Construction Emissions Greenhouse Gas Emissions

Construction associated with the alternative site plan would result in less building area than what was analyzed with the proposed project in the Draft EIR. Therefore, construction GHG emissions would not exceed what was evaluated for the previously approved project.

Long-Term Operational Greenhouse Gas Emissions

Operational or long-term emissions would occur over the project’s lifetime. GHG emissions would result from direct emissions such as project generated vehicular traffic, on-site combustion of natural gas, and operation of any landscaping equipment. Operational GHG emissions would also result from indirect sources, such as off-site generation of electrical power over the life of the project, the energy required to convey water to, and wastewater from the project site, the emissions associated with

solid waste generated from the Project site, and any fugitive refrigerants from air conditioning or refrigerators. **Table 4: Operational GHG Emissions**, summarizes the total GHG emissions associated with the original project and the Alternative Proposal. **Table 4** shows that the Alternative Proposal would have similar operational GHG emissions compared to the original project and would not exceed the BAAQMD’s threshold. The change in emissions would remain less than significant and would not require additional mitigation.

Table 4: Operational GHG Emissions

Emissions Source	MTCO ₂ e ^{1,2,3}				
	Existing	Original Project	Original Project – Existing	Alternative Proposal	Alternative Proposal – Existing
Area	<1	8	8	15	15
Energy	232	648	416	804	572
Mobile	1,214	1,102	-112	951	-263
Waste	19	33	14	42	23
Water	19	51	32	59	40
Total Annual Project GHG Emissions	1,484	1,843	359	1,871	387
Net Project Alternative GHG Emissions	NA	359	NA	387	NA
Threshold	NA	1,100	NA	1,100	NA
Exceeds Threshold?	NA	No	NA	No	NA

1. Emissions were calculated using CalEEMod version 2016.3.2.

2. Emissions may not total due to rounding.

3. Emissions conservatively assume energy would be procured from traditional sources and do not take credit for emissions reductions from energy procured from the Silicon Valley Clean Energy Community Choice Aggregator.

Source: CalEEMod version 2016.3.2. Refer to Appendix A for model outputs.

Appendix A

Air Quality and GHG Data

Westport Alternative Proposal - Santa Clara County, Annual

Westport Alternative Proposal
Santa Clara County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	232.00	Space	2.09	129,490.00	0
Parking Lot	117.00	Space	1.05	46,800.00	0
Apartments Low Rise	88.00	Dwelling Unit	5.50	187,735.00	252
Retirement Community	206.00	Dwelling Unit	41.20	209,871.00	420
Strip Mall	8.04	1000sqft	0.18	8,040.00	0
Medical Office Building	2.14	1000sqft	0.05	2,140.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	58
Climate Zone	4			Operational Year	2020
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	641.35	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Based on information from applicant

Land Use - Based on applicants information

Low Density Townhomes and Rowhomes

Construction Phase - No construction run

Off-road Equipment -

Off-road Equipment -
 Off-road Equipment -
 Off-road Equipment - Anticipated equipment
 Off-road Equipment -
 Off-road Equipment -
 Trips and VMT -
 Demolition - Operation only run
 Grading - Operational run only
 Architectural Coating -
 Vehicle Trips - Based on Trip Generation Table
 Woodstoves - Prohibited per BAAQMD Regulation 6, Rule 3.
 Energy Use -
 Water And Wastewater -
 Construction Off-road Equipment Mitigation - No construction, operational only
 Mobile Land Use Mitigation - Assisted-Living conservatively assume two beds per unit
 Mobile Commute Mitigation -
 Area Mitigation -
 Energy Mitigation -
 Water Mitigation -
 Waste Mitigation - per AB 939
 Stationary Sources - Emergency Generators and Fire Pumps -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	70.00	0.00
tblConstructionPhase	NumDays	40.00	0.00
tblConstructionPhase	NumDays	110.00	0.00
tblConstructionPhase	NumDays	75.00	0.00
tblConstructionPhase	NumDays	1,110.00	0.00

tblConstructionPhase	NumDays	75.00	0.00
tblConstructionPhase	PhaseEndDate	10/15/2020	7/9/2020
tblConstructionPhase	PhaseEndDate	12/10/2020	10/15/2020
tblConstructionPhase	PhaseEndDate	5/13/2021	12/10/2020
tblConstructionPhase	PhaseEndDate	11/27/2025	8/14/2020
tblConstructionPhase	PhaseEndDate	8/14/2025	5/13/2020
tblConstructionPhase	PhaseEndDate	3/12/2026	11/27/2020
tblConstructionPhase	PhaseStartDate	8/15/2025	8/15/2020
tblConstructionPhase	PhaseStartDate	5/14/2021	5/14/2020
tblConstructionPhase	PhaseStartDate	11/28/2025	11/28/2020
tblFireplaces	NumberGas	13.20	88.00
tblFireplaces	NumberGas	30.90	0.00
tblFireplaces	NumberWood	14.96	0.00
tblFireplaces	NumberWood	35.02	0.00
tblLandUse	LandUseSquareFeet	92,800.00	129,490.00
tblLandUse	LandUseSquareFeet	88,000.00	187,735.00
tblLandUse	LandUseSquareFeet	206,000.00	209,871.00
tblLandUse	Population	589.00	420.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	30.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	40.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	10.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	15.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	60.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	45.00	100.00

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					
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	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	1.9610	0.0349	2.1976	1.8000e-004		0.0128	0.0128		0.0128	0.0128	0.0000	14.5581	14.5581	3.7000e-003	2.0000e-004	14.7108
Energy	0.0165	0.1408	0.0610	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	800.7282	800.7282	0.0320	8.9500e-003	804.1955
Mobile	0.4268	1.8330	5.2522	0.0168	1.4695	0.0167	1.4862	0.3934	0.0157	0.4091	0.0000	1,533.7863	1,533.7863	0.0542	0.0000	1,535.1414

Waste						0.0000	0.0000		0.0000	0.0000	33.8569	0.0000	33.8569	2.0009	0.0000	83.8789
Water						0.0000	0.0000		0.0000	0.0000	6.3512	44.2325	50.5837	0.6543	0.0158	71.6553
Total	2.4042	2.0087	7.5109	0.0179	1.4695	0.0409	1.5104	0.3934	0.0399	0.4333	40.2081	2,393.3052	2,433.5132	2.7451	0.0250	2,509.5819

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	1.9610	0.0349	2.1976	1.8000e-004		0.0128	0.0128		0.0128	0.0128	0.0000	14.5581	14.5581	3.7000e-003	2.0000e-004	14.7108
Energy	0.0165	0.1408	0.0610	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	800.7282	800.7282	0.0320	8.9500e-003	804.1955
Mobile	0.3631	1.3783	3.6501	0.0104	0.8748	0.0106	0.8855	0.2342	9.9700e-003	0.2442	0.0000	949.7370	949.7370	0.0378	0.0000	950.6808
Waste						0.0000	0.0000		0.0000	0.0000	16.9284	0.0000	16.9284	1.0004	0.0000	41.9395
Water						0.0000	0.0000		0.0000	0.0000	5.0810	37.1540	42.2350	0.5235	0.0127	59.0992
Total	2.3406	1.5540	5.9087	0.0115	0.8748	0.0348	0.9097	0.2342	0.0342	0.2684	22.0094	1,802.1773	1,824.1868	1.5974	0.0218	1,870.6257

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	2.65	22.63	21.33	35.78	40.47	14.90	39.77	40.47	14.39	38.06	45.26	24.70	25.04	41.81	12.62	25.46

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	7/10/2020	7/9/2020	5	0	

2	Site Preparation	Site Preparation	10/16/2020	10/15/2020	5	0
3	Grading	Grading	12/11/2020	12/10/2020	5	0
4	Building Construction	Building Construction	5/14/2020	5/13/2020	5	0
5	Paving	Paving	8/15/2020	8/14/2020	5	0
6	Architectural Coating	Architectural Coating	11/28/2020	11/27/2020	5	0

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.14

Residential Indoor: 805,152; Residential Outdoor: 268,384; Non-Residential Indoor: 15,270; Non-Residential Outdoor: 5,090; Striped

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
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36

Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	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
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	289.00	62.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	58.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

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	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	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

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	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	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 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					

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	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	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 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 Grading - 2020

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	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	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

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					

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					
Off-Road	0.0000	0.0000	0.0000	0.0000	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 Off-Site

3.7 Architectural Coating - 2020

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	0.0000	0.0000	0.0000	0.0000	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	0.0000	0.0000	0.0000	0.0000	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

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					
Archit. Coating	0.0000	0.0000	0.0000	0.0000	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	0.0000	0.0000	0.0000	0.0000	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 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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Density

Increase Diversity

Improve Destination Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.3631	1.3783	3.6501	0.0104	0.8748	0.0106	0.8855	0.2342	9.9700e-003	0.2442	0.0000	949.7370	949.7370	0.0378	0.0000	950.6808
Unmitigated	0.4268	1.8330	5.2522	0.0168	1.4695	0.0167	1.4862	0.3934	0.0157	0.4091	0.0000	1,533.7863	1,533.7863	0.0542	0.0000	1,535.1414

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	623.92	623.92	623.92	1,622,906	966,166
Medical Office Building	60.01	60.01	60.01	173,670	103,391
Enclosed Parking Structure	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Retirement Community	558.26	558.26	558.26	1,452,115	864,489
Strip Mall	251.97	251.97	251.97	703,040	418,541
Total	1,494.16	1,494.16	1,494.16	3,951,731	2,352,587

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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 Low Rise	10.80	4.80	5.70	31.00	15.00	54.00	100	0	0
Medical Office Building	9.50	7.30	7.30	29.60	51.40	19.00	100	0	0
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Retirement Community	10.80	4.80	5.70	31.00	15.00	54.00	100	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Medical Office Building	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Enclosed Parking Structure	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Parking Lot	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Retirement Community	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785
Strip Mall	0.604810	0.038204	0.185149	0.108513	0.015498	0.004981	0.012268	0.020156	0.002083	0.001571	0.005363	0.000620	0.000785

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	637.8326	637.8326	0.0288	5.9700e-003	640.3318
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	637.8326	637.8326	0.0288	5.9700e-003	640.3318
NaturalGas Mitigated	0.0165	0.1408	0.0610	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	162.8956	162.8956	3.1200e-003	2.9900e-003	163.8636
NaturalGas Unmitigated	0.0165	0.1408	0.0610	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	162.8956	162.8956	3.1200e-003	2.9900e-003	163.8636

5.2 Energy by Land Use - NaturalGas

Unmitigated

	Natural Gas 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 Low Rise	897499	4.8400e-003	0.0414	0.0176	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003	0.0000	47.8940	47.8940	9.2000e-004	8.8000e-004	48.1786
Enclosed Parking Structure	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
Medical Office Building	35031.8	1.9000e-004	1.7200e-003	1.4400e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	1.8694	1.8694	4.0000e-005	3.0000e-005	1.8805
Parking Lot	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
Retirement Community	2.10096e+006	0.0113	0.0968	0.0412	6.2000e-004		7.8300e-003	7.8300e-003		7.8300e-003	7.8300e-003	0.0000	112.1154	112.1154	2.1500e-003	2.0600e-003	112.7816
Strip Mall	19054.8	1.0000e-004	9.3000e-004	7.8000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0168	1.0168	2.0000e-005	2.0000e-005	1.0229
Total		0.0165	0.1408	0.0610	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	162.8956	162.8956	3.1300e-003	2.9900e-003	163.8636

Mitigated

	Natural Gas 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 Low Rise	897499	4.8400e-003	0.0414	0.0176	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003	0.0000	47.8940	47.8940	9.2000e-004	8.8000e-004	48.1786
Enclosed Parking Structure	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
Medical Office Building	35031.8	1.9000e-004	1.7200e-003	1.4400e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	1.8694	1.8694	4.0000e-005	3.0000e-005	1.8805
Parking Lot	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
Retirement Community	2.10096e+006	0.0113	0.0968	0.0412	6.2000e-004		7.8300e-003	7.8300e-003		7.8300e-003	7.8300e-003	0.0000	112.1154	112.1154	2.1500e-003	2.0600e-003	112.7816
Strip Mall	19054.8	1.0000e-004	9.3000e-004	7.8000e-004	1.0000e-005		7.0000e-005	7.0000e-005		7.0000e-005	7.0000e-005	0.0000	1.0168	1.0168	2.0000e-005	2.0000e-005	1.0229
Total		0.0165	0.1408	0.0610	9.0000e-004		0.0114	0.0114		0.0114	0.0114	0.0000	162.8956	162.8956	3.1300e-003	2.9900e-003	163.8636

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	382694	111.3302	5.0300e-003	1.0400e-003	111.7664
Enclosed Parking Structure	734208	213.5896	9.6600e-003	2.0000e-003	214.4265
Medical Office Building	38156.2	11.1001	5.0000e-004	1.0000e-004	11.1436
Parking Lot	16380	4.7651	2.2000e-004	4.0000e-005	4.7838
Retirement Community	935145	272.0445	0.0123	2.5500e-003	273.1104
Strip Mall	85947.6	25.0031	1.1300e-003	2.3000e-004	25.1011
Total		637.8326	0.0288	5.9600e-003	640.3318

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	382694	111.3302	5.0300e-003	1.0400e-003	111.7664
Enclosed Parking Structure	734208	213.5896	9.6600e-003	2.0000e-003	214.4265
Medical Office Building	38156.2	11.1001	5.0000e-004	1.0000e-004	11.1436
Parking Lot	16380	4.7651	2.2000e-004	4.0000e-005	4.7838

Consumer Products	1.6040					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Hearth	1.1100e-003	9.4900e-003	4.0400e-003	6.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004	0.0000	10.9859	10.9859	2.1000e-004	2.0000e-004	11.0511
Landscaping	0.0670	0.0254	2.1936	1.2000e-004		0.0121	0.0121		0.0121	0.0121	0.0000	3.5723	3.5723	3.4900e-003	0.0000	3.6596
Total	1.9610	0.0349	2.1976	1.8000e-004		0.0128	0.0128		0.0128	0.0128	0.0000	14.5581	14.5581	3.7000e-003	2.0000e-004	14.7108

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	0.2889					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.6040					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	1.1100e-003	9.4900e-003	4.0400e-003	6.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004	0.0000	10.9859	10.9859	2.1000e-004	2.0000e-004	11.0511
Landscaping	0.0670	0.0254	2.1936	1.2000e-004		0.0121	0.0121		0.0121	0.0121	0.0000	3.5723	3.5723	3.4900e-003	0.0000	3.6596
Total	1.9610	0.0349	2.1976	1.8000e-004		0.0128	0.0128		0.0128	0.0128	0.0000	14.5581	14.5581	3.7000e-003	2.0000e-004	14.7108

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	42.2350	0.5235	0.0127	59.0992
Unmitigated	50.5837	0.6543	0.0158	71.6553

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	5.73355 / 3.61463	14.5247	0.1874	4.5300e-003	20.5598
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0.268528 / 0.0511483	0.5600	8.7700e-003	2.1000e-004	0.8422
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Retirement Community	13.4217 / 8.46152	34.0010	0.4387	0.0106	48.1286
Strip Mall	0.595543 / 0.36501	1.4981	0.0195	4.7000e-004	2.1249
Total		50.5837	0.6543	0.0158	71.6554

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	4.58684 / 3.39414	12.1313	0.1500	3.6300e-003	16.9614
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0.214823 / 0.0480282	0.4552	7.0200e-003	1.7000e-004	0.6810
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Retirement Community	10.7374 / 7.94537	28.3983	0.3510	8.5000e-003	39.7051
Strip Mall	0.476434 / 0.342745	1.2501	0.0156	3.8000e-004	1.7518
Total		42.2350	0.5236	0.0127	59.0992

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	16.9284	1.0004	0.0000	41.9395
Unmitigated	33.8569	2.0009	0.0000	83.8789

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	40.48	8.2171	0.4856	0.0000	20.3575
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	23.11	4.6911	0.2772	0.0000	11.6221
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Retirement Community	94.76	19.2354	1.1368	0.0000	47.6550
Strip Mall	8.44	1.7132	0.1013	0.0000	4.2445
Total		33.8569	2.0009	0.0000	83.8789

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	20.24	4.1085	0.2428	0.0000	10.1787
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	11.555	2.3456	0.1386	0.0000	5.8110

Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Retirement Community	47.38	9.6177	0.5684	0.0000	23.8275
Strip Mall	4.22	0.8566	0.0506	0.0000	2.1222
Total		16.9284	1.0004	0.0000	41.9395

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
