

## California Mixed Use Complex - SAC Sacramento County, Annual

### 1.0 Project Characteristics

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#### 1.1 Land Usage

Land Uses	Size	Metric
Parking Lot	50	1000sqft
Quality Restaurant	5	1000sqft
Apartments Mid Rise	100	Dwelling Unit
Supermarket	45	1000sqft

#### 1.2 Other Project Characteristics

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	3.5	<b>Utility Company</b>	Sacramento Municipal Utility District
<b>Climate Zone</b>	6	<b>Precipitation Freq (Days)</b>	58		

#### 1.3 User Entered Comments

Project Characteristics -

Land Use - Building lot acreage is 1.6 acres. Zeroed out acres on non-residential since this is a multi-story, mixed use project. 0.5 acres of open space included in project but not modeled or used to calculate density.

Construction Phase - Project proponent reduced the construction schedule in half the time of defaults.

Off-road Equipment - Doubling equipment list since halving the construction schedule.

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Grading - Exporting 32 cubic yards soil during site prep. Exporting 16 cubic yards soil during grading.

Water And Wastewater - Project wastewater will be processed at a facility with aerobic treatment.

Land Use Change - grassland acres initially 3.25, final 1.0

Sequestration - planting 14 hardwood maple trees.

Construction Off-road Equipment Mitigation - All equipment using tier 3 engines. No DPFs. Water exposed area 2x/day.

Mobile Land Use Mitigation - 36 du/acre density, distance to downtown 0.2 miles, distance to transit 0.01, connecting ped network on and off-site

Energy Mitigation - Title 24 exceed by 15% - LEED. Solar panels on roof - 5 kW system - 8,094 annual electricity generation.

Demolition -

## **2.0 Emissions Summary**

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## 2.1 Overall Construction

### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2011	3.52	4.28	3.15	0.01	0.10	0.28	0.38	0.01	0.28	0.30	0.00	442.03	442.03	0.06	0.00	443.38
<b>Total</b>	<b>3.52</b>	<b>4.28</b>	<b>3.15</b>	<b>0.01</b>	<b>0.10</b>	<b>0.28</b>	<b>0.38</b>	<b>0.01</b>	<b>0.28</b>	<b>0.30</b>	<b>0.00</b>	<b>442.03</b>	<b>442.03</b>	<b>0.06</b>	<b>0.00</b>	<b>443.38</b>

### 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					
2011	3.23	2.46	3.07	0.01	0.09	0.19	0.28	0.01	0.19	0.20	0.00	442.03	442.03	0.06	0.00	443.38
<b>Total</b>	<b>3.23</b>	<b>2.46</b>	<b>3.07</b>	<b>0.01</b>	<b>0.09</b>	<b>0.19</b>	<b>0.28</b>	<b>0.01</b>	<b>0.19</b>	<b>0.20</b>	<b>0.00</b>	<b>442.03</b>	<b>442.03</b>	<b>0.06</b>	<b>0.00</b>	<b>443.38</b>

## 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	1.08	0.01	0.78	0.00		0.00	0.00		0.00	0.00	0.00	1.23	1.23	0.00	0.00	1.26
Energy	0.02	0.16	0.11	0.00		0.00	0.01		0.00	0.01	0.00	814.89	814.89	0.04	0.02	820.57
Mobile	5.20	9.37	45.46	0.05	4.27	0.29	4.55	0.18	0.29	0.47	0.00	4,114.60	4,114.60	0.28	0.00	4,120.45
Waste						0.00	0.00		0.00	0.00	61.78	0.00	61.78	3.65	0.00	138.46
Water						0.00	0.00		0.00	0.00	0.00	22.36	22.36	0.00	0.01	25.71
<b>Total</b>	<b>6.30</b>	<b>9.54</b>	<b>46.35</b>	<b>0.05</b>	<b>4.27</b>	<b>0.29</b>	<b>4.56</b>	<b>0.18</b>	<b>0.29</b>	<b>0.48</b>	<b>61.78</b>	<b>4,953.08</b>	<b>5,014.86</b>	<b>3.97</b>	<b>0.03</b>	<b>5,106.45</b>

## 2.2 Overall Operational

### Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.08	0.01	0.78	0.00		0.00	0.00		0.00	0.00	0.00	1.23	1.23	0.00	0.00	1.26
Energy	0.02	0.15	0.10	0.00		0.00	0.01		0.00	0.01	0.00	779.48	779.48	0.04	0.02	784.93
Mobile	4.11	6.42	34.39	0.03	2.45	0.18	2.63	0.10	0.18	0.28	0.00	2,460.68	2,460.68	0.19	0.00	2,464.75
Waste						0.00	0.00		0.00	0.00	61.78	0.00	61.78	3.65	0.00	138.46
Water						0.00	0.00		0.00	0.00	0.00	22.36	22.36	0.00	0.01	25.71
<b>Total</b>	<b>5.21</b>	<b>6.58</b>	<b>35.27</b>	<b>0.03</b>	<b>2.45</b>	<b>0.18</b>	<b>2.64</b>	<b>0.10</b>	<b>0.18</b>	<b>0.29</b>	<b>61.78</b>	<b>3,263.75</b>	<b>3,325.53</b>	<b>3.88</b>	<b>0.03</b>	<b>3,415.11</b>

## 2.3 Vegetation

### Vegetation

	ROG	NOx	CO	SO2	CO2e
Category	tons				MT
New Trees					14.59
Vegetation Land Change					-9.70
<b>Total</b>					<b>4.89</b>

### 3.0 Construction Detail

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#### 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

#### 3.2 Site Preparation - 2011

##### 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					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.08	0.04	0.00		0.00	0.00		0.00	0.00	0.00	7.11	7.11	0.00	0.00	7.12
<b>Total</b>	<b>0.01</b>	<b>0.08</b>	<b>0.04</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>7.11</b>	<b>7.11</b>	<b>0.00</b>	<b>0.00</b>	<b>7.12</b>

### 3.2 Site Preparation - 2011

#### 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.15	0.00	0.00	0.15
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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.13	0.00	0.00	0.13
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.28</b>	<b>0.28</b>	<b>0.00</b>	<b>0.00</b>	<b>0.28</b>

#### 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					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.04	0.04	0.00		0.00	0.00		0.00	0.00	0.00	7.11	7.11	0.00	0.00	7.12
<b>Total</b>	<b>0.01</b>	<b>0.04</b>	<b>0.04</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>7.11</b>	<b>7.11</b>	<b>0.00</b>	<b>0.00</b>	<b>7.12</b>

### 3.2 Site Preparation - 2011

#### 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.15	0.00	0.00	0.15
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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.13	0.00	0.00	0.13
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.28</b>	<b>0.28</b>	<b>0.00</b>	<b>0.00</b>	<b>0.28</b>

### 3.3 Grading - 2011

#### 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					0.02	0.00	0.02	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.02	0.13	0.07	0.00		0.01	0.01		0.01	0.01	0.00	10.41	10.41	0.00	0.00	10.44
<b>Total</b>	<b>0.02</b>	<b>0.13</b>	<b>0.07</b>	<b>0.00</b>	<b>0.02</b>	<b>0.01</b>	<b>0.03</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.00</b>	<b>10.41</b>	<b>10.41</b>	<b>0.00</b>	<b>0.00</b>	<b>10.44</b>



### 3.3 Grading - 2011

#### 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.07	0.00	0.00	0.07
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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.26	0.00	0.00	0.26
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.33</b>	<b>0.33</b>	<b>0.00</b>	<b>0.00</b>	<b>0.33</b>

#### 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					0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.01	0.05	0.06	0.00		0.00	0.00		0.00	0.00	0.00	10.41	10.41	0.00	0.00	10.44
<b>Total</b>	<b>0.01</b>	<b>0.05</b>	<b>0.06</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>10.41</b>	<b>10.41</b>	<b>0.00</b>	<b>0.00</b>	<b>10.44</b>

### 3.3 Grading - 2011

#### 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.07	0.00	0.00	0.07
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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.26	0.00	0.00	0.26
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.33</b>	<b>0.33</b>	<b>0.00</b>	<b>0.00</b>	<b>0.33</b>

### 3.4 Building Construction - 2011

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.67	3.59	2.24	0.00		0.25	0.25		0.25	0.25	0.00	322.55	322.55	0.05	0.00	323.70
<b>Total</b>	<b>0.67</b>	<b>3.59</b>	<b>2.24</b>	<b>0.00</b>		<b>0.25</b>	<b>0.25</b>		<b>0.25</b>	<b>0.25</b>	<b>0.00</b>	<b>322.55</b>	<b>322.55</b>	<b>0.05</b>	<b>0.00</b>	<b>323.70</b>

### 3.4 Building Construction - 2011

#### 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.03	0.28	0.26	0.00	0.01	0.01	0.02	0.00	0.01	0.01	0.00	35.46	35.46	0.00	0.00	35.49
Worker	0.04	0.04	0.43	0.00	0.06	0.00	0.07	0.00	0.00	0.00	0.00	52.64	52.64	0.00	0.00	52.71
<b>Total</b>	<b>0.07</b>	<b>0.32</b>	<b>0.69</b>	<b>0.00</b>	<b>0.07</b>	<b>0.01</b>	<b>0.09</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>	<b>0.00</b>	<b>88.10</b>	<b>88.10</b>	<b>0.00</b>	<b>0.00</b>	<b>88.20</b>

#### 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	0.40	1.98	2.17	0.00		0.17	0.17		0.17	0.17	0.00	322.55	322.55	0.05	0.00	323.70
<b>Total</b>	<b>0.40</b>	<b>1.98</b>	<b>2.17</b>	<b>0.00</b>		<b>0.17</b>	<b>0.17</b>		<b>0.17</b>	<b>0.17</b>	<b>0.00</b>	<b>322.55</b>	<b>322.55</b>	<b>0.05</b>	<b>0.00</b>	<b>323.70</b>

### 3.4 Building Construction - 2011

#### 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.03	0.28	0.26	0.00	0.01	0.01	0.02	0.00	0.01	0.01	0.00	35.46	35.46	0.00	0.00	35.49
Worker	0.04	0.04	0.43	0.00	0.06	0.00	0.07	0.00	0.00	0.00	0.00	52.64	52.64	0.00	0.00	52.71
<b>Total</b>	<b>0.07</b>	<b>0.32</b>	<b>0.69</b>	<b>0.00</b>	<b>0.07</b>	<b>0.01</b>	<b>0.09</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>	<b>0.00</b>	<b>88.10</b>	<b>88.10</b>	<b>0.00</b>	<b>0.00</b>	<b>88.20</b>

### 3.5 Paving - 2011

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.02	0.14	0.09	0.00		0.01	0.01		0.01	0.01	0.00	10.85	10.85	0.00	0.00	10.89
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>0.02</b>	<b>0.14</b>	<b>0.09</b>	<b>0.00</b>		<b>0.01</b>	<b>0.01</b>		<b>0.01</b>	<b>0.01</b>	<b>0.00</b>	<b>10.85</b>	<b>10.85</b>	<b>0.00</b>	<b>0.00</b>	<b>10.89</b>

### 3.5 Paving - 2011

#### 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.65	0.00	0.00	0.65
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.65</b>	<b>0.65</b>	<b>0.00</b>	<b>0.00</b>	<b>0.65</b>

#### 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	0.01	0.06	0.08	0.00		0.01	0.01		0.01	0.01	0.00	10.85	10.85	0.00	0.00	10.89
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>0.01</b>	<b>0.06</b>	<b>0.08</b>	<b>0.00</b>		<b>0.01</b>	<b>0.01</b>		<b>0.01</b>	<b>0.01</b>	<b>0.00</b>	<b>10.85</b>	<b>10.85</b>	<b>0.00</b>	<b>0.00</b>	<b>10.89</b>

### 3.5 Paving - 2011

#### 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.65	0.00	0.00	0.65
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.65</b>	<b>0.65</b>	<b>0.00</b>	<b>0.00</b>	<b>0.65</b>

### 3.6 Architectural Coating - 2011

#### 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	2.72					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.02	0.01	0.00		0.00	0.00		0.00	0.00	0.00	1.28	1.28	0.00	0.00	1.28
<b>Total</b>	<b>2.72</b>	<b>0.02</b>	<b>0.01</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.28</b>	<b>1.28</b>	<b>0.00</b>	<b>0.00</b>	<b>1.28</b>

### 3.6 Architectural Coating - 2011

#### 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.48	0.00	0.00	0.48
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.48</b>	<b>0.48</b>	<b>0.00</b>	<b>0.00</b>	<b>0.48</b>

#### 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	2.72					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00	0.00	1.28	1.28	0.00	0.00	1.28
<b>Total</b>	<b>2.72</b>	<b>0.01</b>	<b>0.01</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.28</b>	<b>1.28</b>	<b>0.00</b>	<b>0.00</b>	<b>1.28</b>

### 3.6 Architectural Coating - 2011

#### 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.48	0.00	0.00	0.48
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.48</b>	<b>0.48</b>	<b>0.00</b>	<b>0.00</b>	<b>0.48</b>

## 4.0 Mobile Detail

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### 4.1 Mitigation Measures Mobile

- Increase Density
- Increase Diversity
- Improve Destination Accessibility
- Increase Transit Accessibility
- Integrate Below Market Rate Housing
- Improve Pedestrian Network
- Implement NEV 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	4.11	6.42	34.39	0.03	2.45	0.18	2.63	0.10	0.18	0.28	0.00	2,460.68	2,460.68	0.19	0.00	2,464.75
Unmitigated	5.20	9.37	45.46	0.05	4.27	0.29	4.55	0.18	0.29	0.47	0.00	4,114.60	4,114.60	0.28	0.00	4,120.45
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

#### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	659.00	716.00	607.00	1,822,838	1,047,049
Parking Lot	0.00	0.00	0.00		
Quality Restaurant	449.75	471.80	360.80	532,765	306,024
Supermarket	4,600.80	7,991.55	7489.80	6,323,738	3,632,392
<b>Total</b>	<b>5,709.55</b>	<b>9,179.35</b>	<b>8,457.60</b>	<b>8,679,341</b>	<b>4,985,464</b>

#### 4.3 Trip Type Information

Land Use	Miles			Trip %		
	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
Apartments Mid Rise	10.80	7.30	7.50	32.90	18.00	49.10
Parking Lot	10.80	7.30	7.30	0.00	0.00	0.00

Land Use	Miles			Trip %		
	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
Quality Restaurant	10.80	7.30	7.30	12.00	69.00	19.00
Supermarket	10.80	7.30	7.30	6.50	74.50	19.00

## 5.0 Energy Detail

### 5.1 Mitigation Measures Energy

Exceed Title 24

Kilowatt Hours of Renewable Electricity Generated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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						0.00	0.00		0.00	0.00	0.00	614.47	614.47	0.03	0.01	618.92
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	632.15	632.15	0.03	0.01	636.72
NaturalGas Mitigated	0.02	0.15	0.10	0.00		0.00	0.01		0.00	0.01	0.00	165.01	165.01	0.00	0.00	166.01
NaturalGas Unmitigated	0.02	0.16	0.11	0.00		0.00	0.01		0.00	0.01	0.00	182.74	182.74	0.00	0.00	183.85
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

## 5.2 Energy by Land Use - NaturalGas

### Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Apartments Mid Rise	1.33941e+006	0.01	0.06	0.03	0.00		0.00	0.00		0.00	0.00	0.00	71.48	71.48	0.00	0.00	71.91
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quality Restaurant	904150	0.00	0.04	0.04	0.00		0.00	0.00		0.00	0.00	0.00	48.25	48.25	0.00	0.00	48.54
Supermarket	1.1808e+006	0.01	0.06	0.05	0.00		0.00	0.00		0.00	0.00	0.00	63.01	63.01	0.00	0.00	63.40
<b>Total</b>		<b>0.02</b>	<b>0.16</b>	<b>0.12</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>182.74</b>	<b>182.74</b>	<b>0.00</b>	<b>0.00</b>	<b>183.85</b>

### Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
Apartments Mid Rise	1.16807e+006	0.01	0.05	0.02	0.00		0.00	0.00		0.00	0.00	0.00	62.33	62.33	0.00	0.00	62.71
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quality Restaurant	857058	0.00	0.04	0.04	0.00		0.00	0.00		0.00	0.00	0.00	45.74	45.74	0.00	0.00	46.01
Supermarket	1.067e+006	0.01	0.05	0.04	0.00		0.00	0.00		0.00	0.00	0.00	56.94	56.94	0.00	0.00	57.29
<b>Total</b>		<b>0.02</b>	<b>0.14</b>	<b>0.10</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>165.01</b>	<b>165.01</b>	<b>0.00</b>	<b>0.00</b>	<b>166.01</b>

### 5.3 Energy by Land Use - Electricity

#### Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Mid Rise	366256					92.25	0.00	0.00	92.91
Parking Lot	0					0.00	0.00	0.00	0.00
Quality Restaurant	222150					55.95	0.00	0.00	56.36
Supermarket	1.9215e+006					483.95	0.03	0.01	487.46
<b>Total</b>						<b>632.15</b>	<b>0.03</b>	<b>0.01</b>	<b>636.73</b>

#### Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
Apartments Mid Rise	357261					89.98	0.00	0.00	90.63
Parking Lot	-2023.5					-0.51	0.00	0.00	-0.51
Quality Restaurant	212064					53.41	0.00	0.00	53.80
Supermarket	1.87243e+006					471.59	0.02	0.01	475.01
<b>Total</b>						<b>614.47</b>	<b>0.02</b>	<b>0.01</b>	<b>618.93</b>

## 6.0 Area Detail

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### 6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.08	0.01	0.78	0.00		0.00	0.00		0.00	0.00	0.00	1.23	1.23	0.00	0.00	1.26
Unmitigated	1.08	0.01	0.78	0.00		0.00	0.00		0.00	0.00	0.00	1.23	1.23	0.00	0.00	1.26
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

## 6.2 Area by SubCategory

### Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr										MT/yr						
Architectural Coating	0.27					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.78					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.03	0.01	0.78	0.00		0.00	0.00		0.00	0.00	0.00	1.23	1.23	0.00	0.00	0.00	1.26
<b>Total</b>	<b>1.08</b>	<b>0.01</b>	<b>0.78</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.23</b>	<b>1.23</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.26</b>

### 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	0.27					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.78					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.03	0.01	0.78	0.00		0.00	0.00		0.00	0.00	0.00	1.23	1.23	0.00	0.00	0.00	1.26
<b>Total</b>	<b>1.08</b>	<b>0.01</b>	<b>0.78</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.23</b>	<b>1.23</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>1.26</b>

## 7.0 Water Detail

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### 7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					22.36	0.00	0.01	25.71
Unmitigated					22.36	0.00	0.01	25.71
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

## 7.2 Water by Land Use

### Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Mid Rise	6.5154 / 4.10754					12.50	0.00	0.01	14.12
Parking Lot	0 / 0					0.00	0.00	0.00	0.00
Quality Restaurant	1.51767 / 0.0968725					2.15	0.00	0.00	2.53
Supermarket	5.54707 / 0.171559					7.71	0.00	0.00	9.07
<b>Total</b>						<b>22.36</b>	<b>0.00</b>	<b>0.01</b>	<b>25.72</b>

### Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
Apartments Mid Rise	6.5154 / 4.10754					12.50	0.00	0.01	14.12
Parking Lot	0 / 0					0.00	0.00	0.00	0.00
Quality Restaurant	1.51767 / 0.0968725					2.15	0.00	0.00	2.53
Supermarket	5.54707 / 0.171559					7.71	0.00	0.00	9.07
<b>Total</b>						<b>22.36</b>	<b>0.00</b>	<b>0.01</b>	<b>25.72</b>



## 8.0 Waste Detail

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### 8.1 Mitigation Measures Waste

#### Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					61.78	3.65	0.00	138.46
Unmitigated					61.78	3.65	0.00	138.46
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

## 8.2 Waste by Land Use

### Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Mid Rise	46					9.34	0.55	0.00	20.93
Parking Lot	0					0.00	0.00	0.00	0.00
Quality Restaurant	4.56					0.93	0.05	0.00	2.07
Supermarket	253.8					51.52	3.04	0.00	115.46
<b>Total</b>						<b>61.79</b>	<b>3.64</b>	<b>0.00</b>	<b>138.46</b>

### Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
Apartments Mid Rise	46					9.34	0.55	0.00	20.93
Parking Lot	0					0.00	0.00	0.00	0.00
Quality Restaurant	4.56					0.93	0.05	0.00	2.07
Supermarket	253.8					51.52	3.04	0.00	115.46
<b>Total</b>						<b>61.79</b>	<b>3.64</b>	<b>0.00</b>	<b>138.46</b>

## 9.0 Vegetation

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	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons				MT			
Unmitigated					4.89	0.00	0.00	4.89
<b>Total</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>

## 9.1 Vegetation Land Change

### Vegetation Type

	Initial/Final	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	Acres	tons				MT			
Grassland	3.25 / 1					-9.70	0.00	0.00	-9.70
<b>Total</b>						<b>-9.70</b>	<b>0.00</b>	<b>0.00</b>	<b>-9.70</b>

## 9.1 Net New Trees

### Species Class

	Number of Trees	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
		tons				MT			
Hardwood Maple	14					14.59	0.00	0.00	14.59
<b>Total</b>						<b>14.59</b>	<b>0.00</b>	<b>0.00</b>	<b>14.59</b>