

*Appendix 9.5
Energy Data*

12850 CRENSHAW



Construction Fuel

On-Site Diesel ¹	MTCO ₂ e	Gallons of Fuel ⁴	Current County Fuel	Percent
Demolition	58	5,745		
Site Preparation/Grading	14	1,362		
Building Construction	742	73,126		
Paving	23	2,250		
Architectural Coating	5	501		
Total	842	82,984	643,495,000	0.0129%
Off-Site Diesel¹				
Demolition	4	357		
Site Preparation/Grading	33	3,275		
Building Construction	266	26,186		
Paving	0	0		
Architectural Coating	0	0		
Total	303	29,818	3,975,477,800	0.0008%
Off-Site Gasoline²				
Demolition	3	286		
Site Preparation/Grading	1	66		
Building Construction	655	74,370		
Paving	2	187		
Architectural Coating	6	702		
Total	666	75,611	3,975,477,800	0.0019%
Total Diesel Fuel		112,802	643,495,000	0.0175%
Total Gasoline Fuel		75,611	3,975,477,800	0.0019%
Total Construction Fuel	1,811	188,412		

Construction Phase ³	Demolition			Site Preparation			Grading		
	On-Site Diesel (Off-Road)	Off-Site Diesel (Hauling/Vendor)	Off-Site Gas (Worker)	On-Site Diesel (Off-Road)	Off-Site Diesel (Hauling/Vendor)	Off-Site Gas (Worker)	On-Site Diesel (Off-Road)	Off-Site Diesel (Hauling/Vendor)	Off-Site Gas (Worker)
2021	58	4	3	5	0	0.2	9	33	0.4
2022									
2023									
Total	58	4	3	5	0	0	9	33	0
Construction Phase ³	Building Construction			Paving			Architectural Coating		
	On-Site Diesel (Off-Road)	Off-Site Diesel (Hauling/Vendor)	Off-Site Gas (Worker)	On-Site Diesel (Off-Road)	Off-Site Diesel (Hauling/Vendor)	Off-Site Gas (Worker)	On-Site Diesel (Off-Road)	Off-Site Diesel (Hauling/Vendor)	Off-Site Gas (Worker)
2021	129	142	118						
2022	392	76	348						
2023	221	48	189	23	0	2	5	0	6
Total	742	266	655	23	0	2	5	0	6

Notes:

¹ Fuel used for off-road, hauling, and vendor trips assumed to be diesel.

² Fuel used for worker trips assumed to be gasoline.

³ MTCO₂e rates from CalEEMod (3.0 Construction Details).

⁴ For CO₂e emissions, see Chapter 13 (page 94); Conversion Ratios: Climate Registry, General Reporting Protocol, 2016.

Operational Fuel

Vehicle Type	Percent ¹	Annual VMT ²	MGP ³	Annual Fuel	Fuel Type	County Gallons ⁴	County Percent	Statewide	Statewide percent
Passenger Cars	0.9225	4,220,813	21.6	195,408	Gas	3,975,477,800	0.0049%	15,589,042,965	0.0013%
Light/Medium Trucks	0.05246	240,040	17.2	13,956	Diesel	643,495,000	0.0003%	3,107,823,655	0.0004%
Heavy Trucks/Other	0	114,724	6.1	18,807	Diesel	643,495,000	0.0004%		
Total	1.000	4575591		32,763		5,262,467,800			

Land Use ¹	LDA	LDT1	LDT2	MCY	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	SBUS	MH
Apartments Mid Rise	0.548537	0.062339	0.188526	0.004487	0.118574	0.023741	0.006216	0.017891	0.025073	0.00142	0.001685	0.000601	0.00091
Unenclosed Parking with Elevator	0.548537	0.062339	0.188526	0.004487	0.118574	0.023741	0.006216	0.017891	0.025073	0.00142	0.001685	0.000601	0.00091

Notes:

- ¹ Percent of vehicle trip distribution based on fleet mix from CalEEMod (4.4 Fleet Mix).
- ² Total annual operational VMT based on mitigated annual VMT from CalEEMod (4.2 Trip Summary Information).
- ³ Average fuel economy derived from Department of Transportation.
- ⁴ Total annual county fuel per EMFAC 2017 model of projected operational fuel usage.

Electricity and Natural Gas

	Mitigated Project Annual Energy	County Annual Energy ³	Percentage Increase
Electricity (kWh/yr)	1,771,720	68,486,187,103	0.0026%
Electricity (GWh/yr)	1.77172	68486.1871	0.0026%
Natural Gas (million therms)		2921.446642	
Natural Gas (kBTU/yr)	3,012,610	292,144,664,200	0.0010%
Natural Gas (therms)	30,126.10	2,921,446,642	0.0010%

Land Use	Electricity ¹ (kWh/yr)		Natural Gas ² (kBTU/yr)	
	Unmitigated	Mitigated	Unmitigated	Mitigated
Apartments Mid Rise	1027340	1027340	3012610	3012610
Billboards	551,880	551,880	0	0
Unenclosed Parking with Elevator	192,500	192,500	0	0
Total Energy	1,771,720	1,771,720	3,012,610	3,012,610

Notes:

¹ Electricity use per CalEEMod (5.3 Energy by Land Use).

² Natural Gas use per CalEEMod (5.2 Natural Gas by Land Use).

³ County total energy values from California Energy Commission energy reports available through ecdms.energy.ca.gov.

Construction Water

Daily Soil Disturbance ¹	6.25	acres
Days of Soil Disturbance ²	15	days
Water Concentration ³	3,020	gallons/acre
Water Energy Intensity ⁴	3,500	kWh/MG
Total Construction Water	0.28	million gallons
Construction Water Energy	991	kWh
	0.0010	GWh
Percentage Increase Countywide	0.000001%	

Notes:

¹ Total daily acres disturbed from offroad equipment per CalEEMod (3.0 Construction Detail) and maximum SCAQMD LST values for soil-disturbing equipment.

² Number of days of construction with soil-disturbing equipment per CalEEMod (3.0 Construction Detail).

³ Water application rate per Air and Waste Management Association's Air Pollution Engineering Manual.

⁴ Water energy intensity factor for county subarea per CalEEMod User Guide, Appendix D, page D-343.

Operational Water

Mitigated Indoor	17	million gallons
Indoor Energy Intensity Factor ¹	5,411	kWh/MG
Mitigated Outdoor	11	million gallons
Outdoor Energy Intensity Factor ²	3,500	kWh/MG
Operational Water Energy	130487	kWh
Operational Water Energy	0.130487	GWh
Total water use	28	million gallons

Land Use ³	Unmitigated (MG)		Mitigated (MG)	
	Indoor	Outdoor	Indoor	Outdoor
Apartments Mid Rise	17	11	17	11
Unenclosed Parking with Elevator	0	0	0	0
Total Operational Water	17	11	17	11

Notes:

¹ Indoor water energy intensity factor for county subarea per CalEEMod User Guide, Appendix D, page D-343. Factor includes supply, treatment, distribution, and wastewater.

² Outdoor water energy intensity factor for county subarea per CalEEMod User Guide, Appendix D, page D-343. Factor includes supply, treatment, and distribution.

³ Operational water use values per CalEEMod (7.2 Water by Land Use).