Appendix D

Energy Resources Calculations

The Bloc
Draft EIR
Appendix D
Energy Analysis Spreadsheets

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The Bloc

Summary of Energy Use During Construction

Electricty		
Water Consumption	4,224	kWh
Temporary Power (lighting, tools)	27,317	kWh
Electric Equipment	19,102	kWh
Total:	**50,643**	kWh
Gasoline		
On Road	77,658	Gallons
Off Road	0	Gallons
Total:	**77,658**	Gallons
Diesel		
On Road	563,063	Gallons
Off Road	104,435	Gallons
Total:	**667,498**	Gallons
Total Mobile	**745,156**	

Summary of Energy Use During Operations

	Baseline Floor Area to be Removed (Buildout Year)	Proposed New Floor Area Buildout With Project Features	Project (Buildout - Baseline (Buildout)	MXD and City Requirements Reduction	Units
Electricity					
Electricity (building)	242,462	3,572,753	3,330,291		kWh/year
Electricity (signs)	0	1,064,726	1,064,726		kWh/year
Electricity (water)	20,032	156,209	136,177		kWh/year
EV Charging	0	40,261	40,261		kWh/year
Electricity Total	**262,494**	**4,833,949**	**4,571,455**		**kWh/year**
Natural Gas	**114,203**	**0**	-114,203		**cu ft/year**
Mobile					
Gasoline	56,533	97,252	40,719	(105,545)	Gallons/year
Diesel	10,056	17,299	7,243	(18,775)	Gallons/year
Mobile Total	**66,590**	**114,552**	47,962	(124,320)	**Gallons/year**

Construction Electricity Usage

Caterpillar 40-C4.4 Generator[a]

Peak Power Rating - Prime (kW)	36
Typical Load	70%
Average Output (kW)	25.2
Hours per Day	2
Average Daily Output (kWh)	50.4
Building Construction Phase Duration (days)	316
Total Construction (kWh)	15,926
Total Construction (MWh)	15.9

[a]https://www.albancat.com/content/uploads/2014/06/40-C4.4-Spec-Sheet.pdf

Calculation of Diesel Usage During Cosnstruciton (Offroad Equipment):

Phase Name	Off Road Equipment Type	Units	Hours	HP	Load Factor	Avg. Daily Factor	Number of Days	Diesel Fuel Usage	
Existing Buildings-Selective Demolition	Tractors/Loaders/Backhoes	3	8	84	0.37	0.6	204	4,565	
Existing Buildings-Selective Demolition	Cranes	1	8	367	0.29	0.6	204	5,211	
Existing Buildings-Selective Demolition	Crawler Tractors	1	8	87	0.43	0.6	204	1,832	
Existing Buildings-Selective Demolition	Generator Sets	1	8	14	0.74	0.6	204	507	
Existing Buildings-Selective Demolition	Rubber Tired Loaders	3	8	150	0.36	0.6	204	7,932	
New Tower-Structural Demolition	Cranes	1	8	367	0.29	0.6	78.0	1,992	
New Tower-Structural Demolition	Crawler Tractors	1	8	87	0.43	0.6	78.0	700	
New Tower-Structural Demolition	Generator Sets	1	8	14	0.74	0.6	78.0	194	
New Tower-Structural Demolition	Rubber Tired Loaders	3	8	150	0.36	0.6	78.0	3,033	
New Tower-Structural Demolition	Sweepers/Scrubbers	1	8	36	0.46	0.6	78.0	310	
New Tower-Structural Demolition	Tractors/Loaders/Backhoes	3	8	84	0.37	0.6	78.0	1,745	
Utility Relocation	Rollers	1	8	36	0.38	0.6	28.0	92	
Utility Relocation	Rough Terrain Forklifts	1	8	96	0.4	0.6	28.0	258	
Utility Relocation	Sweepers/Scrubbers	1	8	36	0.46	0.6	28.0	111	
Utility Relocation	Tractors/Loaders/Backhoes	1	8	84	0.37	0.6	28.0	209	
New Tower-Grading and Prep for Foundation	Bore/Drill Rigs	2	8	83	0.5	0.6	91.0	1,813	
New Tower-Grading and Prep for Foundation	Cranes	1	8	367	0.29	0.6	91.0	2,324	
New Tower-Grading and Prep for Foundation	Crawler Tractors	2	8	87	0.43	0.6	91.0	1,634	
New Tower-Grading and Prep for Foundation	Generator Sets	1	8	14	0.74	0.6	91.0	226	
New Tower-Grading and Prep for Foundation	Rubber Tired Loaders	2	8	150	0.36	0.6	91.0	2,359	
New Tower-Grading and Prep for Foundation	Sweepers/Scrubbers	1	8	36	0.46	0.6	91.0	362	
New Tower-Grading and Prep for Foundation	Tractors/Loaders/Backhoes	1	8	84	0.37	0.6	91.0	679	
Existing Buildings-Structural Upgrades	Cranes	1	8	367	0.29	0.6	296	7,561	
Existing Buildings-Structural Upgrades	Generator Sets	2	8	14	0.74	0.6	296	1,472	
Existing Buildings-Structural Upgrades	Pumps	2	8	11	0.74	0.6	296	1,157	
Existing Buildings-Structural Upgrades	Rough Terrain Forklifts	2	8	96	0.4	0.6	296	5,456	
Existing Buildings-Structural Upgrades	Tractors/Loaders/Backhoes	3	8	84	0.37	0.6	296	6,624	
New Tower-Foundation	Pumps	4	8	11	0.74	0.6	7.00	55	
New Tower-Foundation	Rough Terrain Forklifts	2	8	96	0.4	0.6	7.00	129	
Existing Buildings-Interior Buildout	Bore/Drill Rigs	1	8	83	0.5	0.6	542	5,398	
Existing Buildings-Interior Buildout	Cranes	1	8	367	0.29	0.6	542	13,844	
Existing Buildings-Interior Buildout	Generator Sets	2	8	14	0.74	0.6	542	2,695	
Existing Buildings-Interior Buildout	Pumps	2	8	11	0.74	0.6	542	2,118	
Existing Buildings-Interior Buildout	Rough Terrain Forklifts	3	8	96	0.4	0.6	542	14,985	
Existing Buildings-Interior Buildout	Tractors/Loaders/Backhoes	1	8	84	0.37	0.6	542	4,043	
						Total Diesel Usage for Construction (Offr		**104,434.9**	**gallons of diesel fuel**

gallons of diesel fuel per horsepower-hour=	0.05

Notes: Equipment assumptions are provide in the CalEEMod output files and fuel usage estimate of 0.05 gallons of diesel fuel per horsepower-hour is from the SCAQMD CEQA Air Quality Handbook, Table A9-3E.

EMFAC2021 Emissions Inventory
Region Type: County
Region: Los Angeles
Calendar Year: 2027
Season: Annual
Vehicle Classification: EMFAC2011 Categories

Region	Veh_Class	Fuel	Speed (miles/hr)	Population (vehicles)	VMT (miles/day)	Trips (trips/day)	Fuel_Gas (1000 gallons/day)	Fuel_DSL (1000 gallons/day)	Miles per Gallon
South Coast	LDA	Gasoline	Aggregate	3,252,973	127,411,269	15,084,514	4,209	0	30.3
South Coast	LDT1	Gasoline	Aggregate	305,004	11,091,280	1,345,171	439	0	25.3
South Coast	LDT2	Gasoline	Aggregate	1,690,655	69,171,014	7,955,024	2,794	0	24.8
						Construction Worker Trip (Composite LDA/LDT1/LDT2):			**27.6**
South Coast	HHDT	Diesel	Aggregate	57,907	7,176,720	908,210	0	1137.1	**6.3**

Notes: Consistent with CalEEMod, a construction worker trip is assumed to be a composite of 50% LDA , 25% for LDT1, and 25% for LDT2. Used EMFAC 2011 Categories for construciton as EMFAC2011 has specific categories for vehicle class T7.

Calculation of Gasoline and Diesel Usage During Construction (Onroad Vehicles):

Phase Name	Daily Worker Trips	Daily Vendor Trips	Daily Haul Trips	Days	Total Worker Trips	Total Vendor Trips	Total Haul Trips	Trip Length (miles)			Total Length (miles)			Avg. Daily Factor	Gallons of Fuel	
								Worker	Vendor	Haul	Worker	Vendor	Haul	(worker and vendor)	Gasoline	Diesel
Existing Buildings-Selective Demolition	120	0	64	204	24480	0	13056	18.5	10.5	27	452880	0	352512	0.6	9,831.7	55,854.6
New Tower-Structural Demolition	200	0	64	78.0	15600	0	4992	18.5	10.5	27	288600	0	134784	0.6	6,265.3	21,356.2
Utility Relocation	60	0	10	28.0	1680	0	280	18.5	10.5	27	31080	0	7560	0.6	674.7	1,197.9
New Tower-Grading and Prep for Foundat	80	0	150	91.0	7280	0	13650	18.5	10.5	27	134680	0	368550	0.6	2,923.8	58,395.7
Existing Buildings-Structural Upgrades	250	160	0	296	74000	47360	0	18.5	10.5	20	1369000	497280	0	0.6	29,720.0	47,275.6
New Tower-Skin	80	20	0	330	26400	6600	0	18.5	10.5	20	488400	69300	0	0.6	10,602.8	6,588.2
New Tower-Grading and Prep for Foundat	80	0	150	7.00	560	0	1050	18.5	10.5	27	10360	0	28350	0.6	224.9	4,492.0
New Tower-Foundation	80	680	0	542	43360	368560	0	18.5	10.5	20	802160	3869880	0	0.6	17,414.3	367,903.2
Closeout	15	14	0	66.0	990	924	0	18.5	10.5	20	18315	9702	0	0.6	397.6	922.4
Architectural Coating	0	0	0	158	0	0	0	18.5	10.5	20	0	0	0	0.6	0.0	0.0
														Total:	**77,657.6**	**563,063.3**

Worker Miles per gallon=	27.64	gasoline
Vedor/Haul miles per gallon=	6.31	diesel

Notes: Consistent with CalEEMod worker vehicles are assumed to be gasoline and 50% LDA, 25%LDT1, and 25% LDT2. Vendor and haul trips are assumed to be 100% diesel Heavy Duty Trucks (T7)

Water Usage for Control of Fugitive Dust during Construction:

Phase	Days	Average Daily Acreage Distrubed	Gallons Per Year	Electricity (kWhr)
Utility Relocation	16	0.5	24,160	235
Existing Buildings-Selective Demolition	214	0.5	323,140	3,143
New Tower-Structural Demolition	35	0.1	10,570	103
Existing Buildings-Structural Upgrades	316	0	0	0
New Tower-Skin	321	0	0	0
New Tower-Grading and Prep for Foun	30	0.5	45,300	441
New Tower-Foundation	2	0.1	604	6
Existing Buildings-Interior Buildout	333	0	0	0
Architectural Coating	107	0	0	0
Closeout	69	0	0	0
		Total:	**357,870**	**3,481**

Water application rate=	3020	gal/acre/day
kWhr equivalent=	0.01	kWhr

Notes: 1) Gallons per year of water usage for dust control is calculated based on a minimum control efficiency of 66% (three times daily) with an application rate of 3,020 gal/acre/day (Air & Waste Management Association Air Pollution Engineering Manual (1992 Edition)) and average of 26 construction days per month.
2) CalEEMod Default: Each gallon of delivered potable water in Southern California is associated with 0.009727 kWhr of electricity).

The Bloc - Existing Operations on Site Buildout Year
Los Angeles-South Coast County, Annual

Land Use Details

Land Uses	*Size*	*Metric*	*Lot Acreage*	*Floor Surface Area*	*Population*
Regional Shopping Center	270	1000sqft		269,622	0
General Office Building	656	1000sqft		656,423	
Hotel	496	Room		412,639	
Health Club	30.4	1000sqft		30,363	
Quality Restaurant	23.2	1000sqft		23,180	
Movie Theater	569	Seat		28,770	

Energy by Land Use - Natural Gas

Land Uses	*kBTU/yr*	cu ft/year
Regional Shopping Center	1,327,657	1,264,435
General Office Building	13,188,758	12,560,722
Hotel	9,990,258	9,514,531
Health Club	1,072,922	1,021,830
Quality Restaurant	2,195,833	2,091,270
Movie Theater	1,015,631	967,268
Total	**28,791,059**	**27,420,056**

Energy by Land Use - Electricity

Land Uses	*kWH/yr*
Regional Shopping Center	2,684,501
General Office Building	10,455,998
Hotel	4,820,818
Health Club	294,103
Quality Restaurant	754,975
Movie Theater	278,673
Total	19,289,068

Water Detail

Land Uses	*Indoor Use (Mgal)*	*Outdoor Use (Mgal)*	*Electricity Use (kWh/yr)*
Regional Shopping Center	19.972	0.000	221,904
General Office Building	116.669	0.000	0
Hotel	12.572	0.000	139,687
Health Club	1.796	0.000	19,953
Quality Restaurant	7.036	0.000	78,176
Movie Theater	5.142	0.000	57,127
Total	151.008	0.000	**381,544**

Notes: Indoor water results in 0.0111 kWhr of electricity usage per gallon from delivery, treatment, and distribution of water within Southern California (CalEEMod). Outdoor water results in 0.009727 kWhr of electricity usage per gallon from delivery and distribution of water within Southern California (CalEEMod).

The Bloc - Existing Floor Area Removed Operations Buildout Year
Los Angeles-South Coast County, Annual

Land Use Details

Land Uses	*Size*	*Metric*	*Lot Acreage*	*Floor Surface Area*	*Population*
Regional Shopping Center	24.34	1000sqft	0.056	24,342	0

Trip Summary Information

Land Uses	*Average Daily Trip Rate*			*Annual VMT*
	Weekday	*Saturday*	*Sunday*	
Total	**587.00**	**587.00**	**587.00**	**1,604,905**

Gasoline and Diesel Usage

	Buildout Year		Existing (Baseline) Year	
	Gasoline	*Diesel*	*Gasoline*	*Diesel*
Miles/Gallon	26.7	9.2	23.5	8.2
% Fleet Mix	94.2%	5.8%	95.0%	5.0%
Total (Gallons):	**56,533**	**10,056**	**65,039**	**9,688**

Energy by Land Use - Natural Gas

Land Uses	*kBTU/yr*	cu ft/year
Regional Shopping Center	119,913	114,203
Total	**119,913**	**114,203**

Energy by Land Use - Electricity

Land Uses	*kWH/yr*
Regional Shopping Center	242,462
Total	242,462

Water Detail

Land Uses	*Indoor Use (Mgal)*	*Outdoor Use (Mgal)*	*Electricity Use (kWh/yr)*
Regional Shopping Center	1.803	0.000	20,032
Total	1.803	0.000	**20,032**

Notes: Indoor water results in 0.0111 kWhr of electricity usage per gallon from delivery, treatment, and distribution of water within Southern California (CalEEMod). Outdoor water results in 0.009727 kWhr of electricity usage per gallon from delivery and distribution of water within Southern California (CalEEMod).

The Bloc - Proposed New Floor Area Buildout Operations Without Project Features
Los Angeles-South Coast County, Annual

Land Use Details

Land Uses	*Size*	*Metric*	*Lot Acreage*	*Floor Surface Area*	*Population*
Enclosed Parking with Elevator	441	Space	3.97	176,400	0
Apartments High Rise	466	Dwelling Unit	7.52	495,625	1050

Trip Summary Information

Land Uses	*Average Daily Trip Rate*			*Annual VMT*
	Weekday	*Saturday*	*Sunday*	
Total	2,797	2,797	2,797	5,757,145

Gasoline and Diesel Usage

	Gasoline	*Diesel*
Miles/Gallon	26.7	9.2
% Fleet Mix	94.2%	5.8%
Total (Gallons):	**202,798**	**36,074**

Note: Fleet mix is 92.3% gasoline @ 30.6 miles/gallon and 7.7% diesel @ 12.1 miles/gallon.

Energy by Land Use - Natural Gas

Land Uses	*kBTU/yr*	cu ft/year
Apartment High Rise	0	0
Enclosed Parking with Elevator	0	0
User Defined Commercial	0	0
Total	0	**0**

Energy by Land Use - Electricity

Land Uses	*kWH/yr*
Apartment High Rise	2,921,584
Enclosed Parking with Elevator	651,169
User Defined Commercial	0
Total	**3,572,753**

Water Detail (Unmitigated)

Land Uses	*Indoor Use (Mgal)*	*Outdoor Use (Mgal)*	*Electricity Use (kWh/yr)*
Apartment High Rise	13.896	0.186	156,209
Enclosed Parking with Elevator	0.000	0.000	0
User Defined Commercial	0.000	0.000	0
Total	13.90	0.19	**156,209**

Notes: Indoor water results in 0.0111 kWhr of electricity usage per gallon from delivery, treatment, and distribution of water within Southern California (CalEEMod). Outdoor water results in 0.009727 kWhr of electricity usage per gallon from delivery and distribution of water within Southern California (CalEEMod).

The Bloc - Proposed New Floor Area Buildout Operations
Los Angeles-South Coast County, Annual

Land Use Details

Land Uses	*Size*	*Metric*	*Lot Acreage*	*Floor Surface Area*	*Population*
Enclosed Parking with Elevator	441	Space	3.97	176400	0
Apartments High Rise	466	Dwelling Unit	7.52	495,625	1050

Trip Summary Information

Land Uses	*Average Daily Trip Rate*			*Mitigated*
	Weekday	*Saturday*	*Sunday*	
Total	1,213	1,213	1,213	2,760,860

Mitigated Gasoline and Diesel Usage

	Gasoline	*Diesel*
Miles/Gallon	26.7	9.2
% Fleet Mix	94.2%	5.8%
Total (Gallons):	**97,252**	**17,299**

Note: Fleet mix is 92.3% gasoline @ 30.6 miles/gallon and 7.7% diesel @ 12.1 miles/gallon.

Energy by Land Use - Natural Gas (Mitigated)

Land Uses	*kBTU/yr*	cu ft/year
Apartment High Rise	0	0
Enclosed Parking with Elevator	0	0
Total	0	**0**

Energy by Land Use - Electricity (Mitigated)

Land Uses	*kWH/yr*
Apartment High Rise	2,921,584
Enclosed Parking with Elevator	651,169
User Defined Commercial	0
Total	**3,572,753**

Note: Reduction in electricity usage reflects 2019 Title 24 energy efficiency standards which assumes exceeding 2016 Title 24 requirements by 10 percent for energy efficiency and 25% for lighting.

Water Detail (Unmitigated)

Land Uses	*Indoor Use (Mgal)*	*Outdoor Use (Mgal)*	*Electricity Use (kWh/yr)*
Apartment High Rise	13.896	0.186	156,209
Enclosed Parking with Elevator	0.000	0.000	0
User Defined Commercial	0.000	0.000	0
Total	13.90	0.19	**156,209**

Notes: Indoor water results in 0.0111 kWhr of electricity usage per gallon from delivery, treatment, and distribution of water within Southern California (CalEEMod). Outdoor water results in 0.009727 kWhr ofelectricity usage per gallon from delivery and distribution of water within Southern California (CalEEMod). The City of Los Angeles Green Building Code (Chapter IX, Article 9, of the LAMC) requires newly constructed non-residential and high-rise residential buildings to reduce indoor water use by at least 20 percent by: (1) using water saving fixtures or flow restrictions; and/or (2) demonstrating a 20 percent reduction in baseline water

EMFAC2021 Emissions Inventory
Region Type: County
Region: Los Angeles
Calendar Year: 2031
Season: Annual
Vehicle Classification: EMFAC2007 Categories

Region	CalYr	Season	Veh_Class	Fuel	MdYr	Speed (miles/hr)	Population (vehicles)	VMT (miles/day)	Trips (trips/day)	Fuel_Gas (1000 gallons/day)	Fuel_DSL (1000 gallons/day)
Los Angeles	2031	Annual	HHDT	Diesel	Aggregated	Aggregated	60,492	7,568,574	957,132	0.00	1,127.36
Los Angeles	2031	Annual	HHDT	Gasoline	Aggregated	Aggregated	18	1,999	365	0.42	0.00
Los Angeles	2031	Annual	LDA	Diesel	Aggregated	Aggregated	4,172	132,366	18,007	0.00	2.98
Los Angeles	2031	Annual	LDA	Gasoline	Aggregated	Aggregated	3,101,657	120,169,284	14,375,990	3,763.78	0.00
Los Angeles	2031	Annual	LDT1	Diesel	Aggregated	Aggregated	3	108	13	0.00	0.00
Los Angeles	2031	Annual	LDT1	Gasoline	Aggregated	Aggregated	290,379	10,521,713	1,286,891	394.00	0.00
Los Angeles	2031	Annual	LDT2	Diesel	Aggregated	Aggregated	6,403	261,646	30,431	0.00	7.74
Los Angeles	2031	Annual	LDT2	Gasoline	Aggregated	Aggregated	1,805,846	72,175,917	8,462,212	2,770.51	0.00
Los Angeles	2031	Annual	LHDT1	Diesel	Aggregated	Aggregated	72,760	2,979,889	915,234	0.00	141.75
Los Angeles	2031	Annual	LHDT1	Gasoline	Aggregated	Aggregated	122,157	4,747,277	1,819,955	312.49	0.00
Los Angeles	2031	Annual	LHDT2	Diesel	Aggregated	Aggregated	34,241	1,357,725	430,709	0.00	75.77
Los Angeles	2031	Annual	LHDT2	Gasoline	Aggregated	Aggregated	18,041	655,180	268,784	49.57	0.00
Los Angeles	2031	Annual	MCY	Gasoline	Aggregated	Aggregated	172,241	1,083,800	344,483	25.89	0.00
Los Angeles	2031	Annual	MDV	Diesel	Aggregated	Aggregated	11,895	444,452	55,436	0.00	17.40
Los Angeles	2031	Annual	MDV	Gasoline	Aggregated	Aggregated	1,039,871	39,085,024	4,833,358	1,832.57	0.00
Los Angeles	2031	Annual	MH	Diesel	Aggregated	Aggregated	6,652	69,236	665	0.00	6.96
Los Angeles	2031	Annual	MH	Gasoline	Aggregated	Aggregated	13,647	145,414	1,365	30.02	0.00
Los Angeles	2031	Annual	MHDT	Diesel	Aggregated	Aggregated	63,856	2,523,858	787,884	0.00	273.77
Los Angeles	2031	Annual	MHDT	Gasoline	Aggregated	Aggregated	12,213	646,412	244,367	117.10	0.00
Los Angeles	2031	Annual	OBUS	Diesel	Aggregated	Aggregated	2,395	172,385	31,971	0.00	23.43
Los Angeles	2031	Annual	OBUS	Gasoline	Aggregated	Aggregated	2,948	100,393	58,993	18.74	0.00
Los Angeles	2031	Annual	SBUS	Diesel	Aggregated	Aggregated	1,429	29,361	20,692	0.00	3.86
Los Angeles	2031	Annual	SBUS	Gasoline	Aggregated	Aggregated	1,581	71,374	6,325	7.73	0.00
Los Angeles	2031	Annual	UBUS	Diesel	Aggregated	Aggregated	0	23	1	0.00	0.00
Los Angeles	2031	Annual	UBUS	Gasoline	Aggregated	Aggregated	386	29,013	1,545	6.14	0.00
Los Angeles	2031	Annual	LDA	Plug-in Hybrid	Aggregated	Aggregated	123,971	2,313,429	512,619	84.47	0.00
Los Angeles	2031	Annual	LDT1	Plug-in Hybrid	Aggregated	Aggregated	2,409	46,110	9,961	1.69	0.00
Los Angeles	2031	Annual	LDT2	Plug-in Hybrid	Aggregated	Aggregated	32,319	600,989	133,640	22.15	0.00
Los Angeles	2031	Annual	MDV	Plug-in Hybrid	Aggregated	Aggregated	19,777	345,485	81,779	12.93	0.00

					MPG	Gallons Per Mile
Totals	268,278,435.58		9,450.22	1,681.02	**24.1**	0.04
Total (GAS)	252,738,813.52	0.94			**26.7**	0.04
Total (DSL)	15,539,622.06	0.06			**9.2**	0.11

Baseline Year
Calendar Year: 2022
Season: Annual
Vehicle Classification: EMFAC2007 Categories

Region	CalYr	Season	Veh_Class	Fuel	MdYr	Speed (miles/hr)	Population (vehicles)	VMT (miles/day)	Trips (trips/day)	Fuel_Gas (1000 gallons/day)	Fuel_DSL (1000 gallons/day)
Los Angeles	2022	Annual	HHDT	Diesel	Aggregated	Aggregated	50,253	6,584,300	777,260	0.00	1,119.64
Los Angeles	2022	Annual	HHDT	Gasoline	Aggregated	Aggregated	63	3,549	1,266	0.92	0.00
Los Angeles	2022	Annual	LDA	Diesel	Aggregated	Aggregated	10,357	316,148	43,007	0.00	8.02
Los Angeles	2022	Annual	LDA	Gasoline	Aggregated	Aggregated	3,492,277	138,838,027	16,264,993	4,986.05	0.00
Los Angeles	2022	Annual	LDT1	Diesel	Aggregated	Aggregated	150	3,072	443	0.00	0.13
Los Angeles	2022	Annual	LDT1	Gasoline	Aggregated	Aggregated	328,949	11,907,335	1,447,068	510.94	0.00
Los Angeles	2022	Annual	LDT2	Diesel	Aggregated	Aggregated	4,420	193,960	21,414	0.00	6.48
Los Angeles	2022	Annual	LDT2	Gasoline	Aggregated	Aggregated	1,526,624	62,593,839	7,170,946	2,797.09	0.00
Los Angeles	2022	Annual	LHDT1	Diesel	Aggregated	Aggregated	51,192	2,199,516	643,937	0.00	109.63
Los Angeles	2022	Annual	LHDT1	Gasoline	Aggregated	Aggregated	125,867	4,864,859	1,875,224	382.22	0.00
Los Angeles	2022	Annual	LHDT2	Diesel	Aggregated	Aggregated	22,589	963,687	284,146	0.00	57.39
Los Angeles	2022	Annual	LHDT2	Gasoline	Aggregated	Aggregated	19,347	711,929	288,236	63.52	0.00
Los Angeles	2022	Annual	MCY	Gasoline	Aggregated	Aggregated	143,563	930,986	287,127	22.88	0.00
Los Angeles	2022	Annual	MDV	Diesel	Aggregated	Aggregated	10,661	424,706	50,627	0.00	18.79
Los Angeles	2022	Annual	MDV	Gasoline	Aggregated	Aggregated	939,734	35,466,374	4,339,505	1,941.72	0.00
Los Angeles	2022	Annual	MH	Diesel	Aggregated	Aggregated	5,298	54,199	530	0.00	5.43
Los Angeles	2022	Annual	MH	Gasoline	Aggregated	Aggregated	17,156	161,515	1,716	33.39	0.00
Los Angeles	2022	Annual	MHDT	Diesel	Aggregated	Aggregated	59,448	2,536,529	726,578	0.00	287.05
Los Angeles	2022	Annual	MHDT	Gasoline	Aggregated	Aggregated	15,640	846,617	312,928	168.17	0.00
Los Angeles	2022	Annual	OBUS	Diesel	Aggregated	Aggregated	2,067	166,997	26,799	0.00	24.34
Los Angeles	2022	Annual	OBUS	Gasoline	Aggregated	Aggregated	3,974	164,696	79,520	33.29	0.00
Los Angeles	2022	Annual	SBUS	Diesel	Aggregated	Aggregated	2,050	42,578	29,680	0.00	5.81
Los Angeles	2022	Annual	SBUS	Gasoline	Aggregated	Aggregated	1,346	61,993	5,383	6.97	0.00
Los Angeles	2022	Annual	UBUS	Diesel	Aggregated	Aggregated	46	7,306	185	0.00	1.19
Los Angeles	2022	Annual	UBUS	Gasoline	Aggregated	Aggregated	438	31,090	1,751	6.79	0.00
Los Angeles	2022	Annual	LDA	Plug-in Hybrid	Aggregated	Aggregated	78,552	1,923,360	324,812	70.07	0.00
Los Angeles	2022	Annual	LDT1	Plug-in Hybrid	Aggregated	Aggregated	175	4,372	725	0.16	0.00
Los Angeles	2022	Annual	LDT2	Plug-in Hybrid	Aggregated	Aggregated	8,466	211,817	35,005	7.77	0.00
Los Angeles	2022	Annual	MDV	Plug-in Hybrid	Aggregated	Aggregated	5,058	116,993	20,914	4.35	0.00

					MPG	Gallons Per Mile
Totals	272,332,347.81		11,036.30	1,643.90	**21.5**	0.05
Total (GAS)	258,839,349.57	0.95			**23.5**	0.04
Total (DSL)	13,492,998.24	0.05			**8.2**	0.12

The Bloc

All Electric Calculation

CAPCOA Consumption Rate[a]

	Natural Gas (Therm/yr/KSF)						Electricity (kWh/yr/KSF)					
Building Type	**Water Heater**	**Primary Heat**	**Cooking**	**Dryer**	**Cooling**	**Misc**	**Water Heater**	**Primary Heat**	**Cooking**	**Dryer**	**Cooling**	**Misc**
Apartments High Rise							1052	350	262	365	397	560

[a] California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emissions Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity. Appendix C. Table E-15. December 2021.

Project Energy Demand

		Natural Gas (Therm/yr/KSF)							Electricity (kWh/yr/KSF)						
Project Uses	**Amount (DU/KSF)**	**Water Heater**	**Primary Heat**	**Cooking**	**Dryer**	**Cooling**	**Misc**	**Total**	**Water Heater**	**Primary Heat**	**Cooking**	**Dryer**	**Cooling**	**Misc**	**Total**
Apartments High Rise	466	0	0	0	0	0	0	**0**	490,232	163,100	122,092	170,090	185,002	260,960	**1,391,476**
Total		0	0	0	0	0	0	0	490,232	163,100	122,092	170,090	185,002	260,960	**1,391,476**

Electricity Increase

Title 24 (All - Electric)	838,334
Non Title 24 (All-Electric)	553,142

The Bloc - SUD Signs

Sign Size	672	ft^2	14 by 48
Energy Useage per year	34,000	kWh/yr	High End
Energy Useage per ft^2	50.5952381	$kWh/yr/ft^2$	
Total Display Square Footage	21,044	ft^2	From IS
Total Energy Use per Year	1,064,726	kWh /yr	
Total Energy Use per Year	1,065	MWh/yr	
CO2e per year	363,746	lbs/year	
CO2e per year	165	MT/year	

Peak Electricity Demand Calculations

Electrical Load Factor Equation

$$f_{Load} = \frac{\text{Average load}}{\text{Maximum load in given time period}}$$

Load Factor (%)[1] **52%**

Project Electricity Demand (Operational)

Annual Demand	Baseline (Existing)	Project	Net Increase
Building (MWh)	242	4,678	4,435
Water (MWh)	20	156	136
Total (MWh)	262	4,834	4,571
Average Daily Demand			
Building (kWh)	664	12,816	12,151
Water (kWh)	55	428	373
Total (kWh)	719	13,244	12,525
Average Load			
Building (kW)	28	534	506
Water (kW)	2	18	16
Total (kW)	30	552	522

Peak Load Calculation

Peak Load (kW)	56	1,045	989
Systemwide Peak Load (MW)	6,089	6,089	6,089
Percent of Peak			0.016%

[1]2017 Report: System Efficiency of California's Electric Grid. California Public Utilities Comn 2017. Page 11, Figure 6. Visual estimate.

EMFAC Emission inventories for County

EMFAC2021 (v1.0.1) Emissions Inventory
Region Type: County
Region: Los Angeles
Calendar Year: **2027** (Construction Start Year)
Season: Annual
Vehicle Classification: EMFAC2011 Categories

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Fuel_Gasoline (1000 gallons/day)	Fuel_DSL (1000 gallons/day)
Los Angeles	2027	HHDT	Aggregatec	Aggregatec	Diesel	0.00	1137.13
Los Angeles	2027	HHDT	Aggregatec	Aggregatec	Gasoline	0.56	0.00
Los Angeles	2027	LDA	Aggregatec	Aggregatec	Diesel	0.00	4.83
Los Angeles	2027	LDA	Aggregatec	Aggregatec	Gasoline	4209.31	0.00
Los Angeles	2027	LDT1	Aggregatec	Aggregatec	Diesel	0.00	0.04
Los Angeles	2027	LDT1	Aggregatec	Aggregatec	Gasoline	439.06	0.00
Los Angeles	2027	LDT2	Aggregatec	Aggregatec	Diesel	0.00	7.47
Los Angeles	2027	LDT2	Aggregatec	Aggregatec	Gasoline	2794.50	0.00
Los Angeles	2027	LHDT1	Aggregatec	Aggregatec	Diesel	0.00	138.13
Los Angeles	2027	LHDT1	Aggregatec	Aggregatec	Gasoline	349.87	0.00
Los Angeles	2027	LHDT2	Aggregatec	Aggregatec	Diesel	0.00	73.25
Los Angeles	2027	LHDT2	Aggregatec	Aggregatec	Gasoline	56.57	0.00
Los Angeles	2027	MCY	Aggregatec	Aggregatec	Gasoline	25.06	0.00
Los Angeles	2027	MDV	Aggregatec	Aggregatec	Diesel	0.00	18.31
Los Angeles	2027	MDV	Aggregatec	Aggregatec	Gasoline	1880.52	0.00
Los Angeles	2027	MH	Aggregatec	Aggregatec	Diesel	0.00	6.45
Los Angeles	2027	MH	Aggregatec	Aggregatec	Gasoline	31.20	0.00
Los Angeles	2027	MHDT	Aggregatec	Aggregatec	Diesel	0.00	291.06
Los Angeles	2027	MHDT	Aggregatec	Aggregatec	Gasoline	141.80	0.00
Los Angeles	2027	OBUS	Aggregatec	Aggregatec	Diesel	0.00	24.06
Los Angeles	2027	OBUS	Aggregatec	Aggregatec	Gasoline	24.57	0.00
Los Angeles	2027	SBUS	Aggregatec	Aggregatec	Diesel	0.00	4.83
Los Angeles	2027	SBUS	Aggregatec	Aggregatec	Gasoline	7.62	0.00
Los Angeles	2027	UBUS	Aggregatec	Aggregatec	Diesel	0.00	0.41
Los Angeles	2027	UBUS	Aggregatec	Aggregatec	Gasoline	6.57	0.00
Los Angeles	2027	LDA	Aggregatec	Aggregatec	Plug-in Hybrid	83.16	0.00
Los Angeles	2027	LDT1	Aggregatec	Aggregatec	Plug-in Hybrid	0.87	0.00
Los Angeles	2027	LDT2	Aggregatec	Aggregatec	Plug-in Hybrid	16.26	0.00
Los Angeles	2027	MDV	Aggregatec	Aggregatec	Plug-in Hybrid	9.42	0.00
						3,678,080,579	622,683,521
					Fuel Usage for Project Construction	77,658	667,498
					Percentage of County for Construction	0.0021%	0.107%

EMFAC Emission inventories for County

EMFAC2021 (v1.0.1) Emissions Inventory
Region Type: County
Region: Los Angeles
Calendar Year: **2031** (Operational Start Year)
Season: Annual
Vehicle Classification: EMFAC2011 Categories

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Fuel_Gasoline (1000 gallons/day)	Fuel_DSL (1000 gallons/day)
Los Angeles	2031	HHDT	Aggregatec	Aggregatec	Diesel	0.00	1127.36
Los Angeles	2031	HHDT	Aggregatec	Aggregatec	Gasoline	0.42	0.00
Los Angeles	2031	LDA	Aggregatec	Aggregatec	Diesel	0.00	2.98
Los Angeles	2031	LDA	Aggregatec	Aggregatec	Gasoline	3763.78	0.00
Los Angeles	2031	LDT1	Aggregatec	Aggregatec	Diesel	0.00	0.00
Los Angeles	2031	LDT1	Aggregatec	Aggregatec	Gasoline	394.00	0.00
Los Angeles	2031	LDT2	Aggregatec	Aggregatec	Diesel	0.00	7.74
Los Angeles	2031	LDT2	Aggregatec	Aggregatec	Gasoline	2770.51	0.00
Los Angeles	2031	LHDT1	Aggregatec	Aggregatec	Diesel	0.00	141.75
Los Angeles	2031	LHDT1	Aggregatec	Aggregatec	Gasoline	312.49	0.00
Los Angeles	2031	LHDT2	Aggregatec	Aggregatec	Diesel	0.00	75.77
Los Angeles	2031	LHDT2	Aggregatec	Aggregatec	Gasoline	49.57	0.00
Los Angeles	2031	MCY	Aggregatec	Aggregatec	Gasoline	25.89	0.00
Los Angeles	2031	MDV	Aggregatec	Aggregatec	Diesel	0.00	17.40
Los Angeles	2031	MDV	Aggregatec	Aggregatec	Gasoline	1832.57	0.00
Los Angeles	2031	MH	Aggregatec	Aggregatec	Diesel	0.00	6.96
Los Angeles	2031	MH	Aggregatec	Aggregatec	Gasoline	30.02	0.00
Los Angeles	2031	MHDT	Aggregatec	Aggregatec	Diesel	0.00	273.77
Los Angeles	2031	MHDT	Aggregatec	Aggregatec	Gasoline	117.10	0.00
Los Angeles	2031	OBUS	Aggregatec	Aggregatec	Diesel	0.00	23.43
Los Angeles	2031	OBUS	Aggregatec	Aggregatec	Gasoline	18.74	0.00
Los Angeles	2031	SBUS	Aggregatec	Aggregatec	Diesel	0.00	3.86
Los Angeles	2031	SBUS	Aggregatec	Aggregatec	Gasoline	7.73	0.00
Los Angeles	2031	UBUS	Aggregatec	Aggregatec	Diesel	0.00	0.00
Los Angeles	2031	UBUS	Aggregatec	Aggregatec	Gasoline	6.14	0.00
Los Angeles	2031	LDA	Aggregatec	Aggregatec	Plug-in Hybrid	84.47	0.00
Los Angeles	2031	LDT1	Aggregatec	Aggregatec	Plug-in Hybrid	1.69	0.00
Los Angeles	2031	LDT2	Aggregatec	Aggregatec	Plug-in Hybrid	22.15	0.00
Los Angeles	2031	MDV	Aggregatec	Aggregatec	Plug-in Hybrid	12.93	0.00

	3,405,078,509	613,573,367
Net Fuel Usage for Project Operation	40,719	7,243
Percentage of County for Operation	0.0012%	0.0012%

The Bloc - Existing Baseline for Site Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	The Bloc - Existing Baseline for Site
Operational Year	2022
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	0.50
Precipitation (days)	16.8
Location	34.04742181840936, -118.25914539299177
County	Los Angeles-South Coast
City	Los Angeles
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4045
EDFZ	16
Electric Utility	Los Angeles Department of Water & Power
Gas Utility	Southern California Gas
App Version	2022.1.1.22

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
Regional Shopping Center	270	1000sqft	6.19	269,622	0.00	0.00	—	—

General Office Building	656	1000sqft	15.1	656,423	0.00	—	—	—
Hotel	496	Room	16.5	412,639	0.00	—	—	—
Health Club	30.4	1000sqft	0.70	30,363	0.00	—	—	—
Quality Restaurant	23.2	1000sqft	0.53	23,180	0.00	—	—	—
Movie Theater (No Matinee)	569	Seat	0.29	28,770	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Waste	S-1/S-2	Implement Waste Reduction Plan

4. Operations Emissions Details

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	4,194
General Office Building	—	—	—	—	—	—	—	—	—	—	16,337
Hotel	—	—	—	—	—	—	—	—	—	—	7,532
Health Club	—	—	—	—	—	—	—	—	—	—	460
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	1,180

Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	435
Total	—	—	—	—	—	—	—	—	—	—	30,137
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	4,194
General Office Building	—	—	—	—	—	—	—	—	—	—	16,337
Hotel	—	—	—	—	—	—	—	—	—	—	7,532
Health Club	—	—	—	—	—	—	—	—	—	—	460
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	1,180
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	435
Total	—	—	—	—	—	—	—	—	—	—	30,137
Annual	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	694
General Office Building	—	—	—	—	—	—	—	—	—	—	2,705
Hotel	—	—	—	—	—	—	—	—	—	—	1,247
Health Club	—	—	—	—	—	—	—	—	—	—	76.1
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	195
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	72.1
Total	—	—	—	—	—	—	—	—	—	—	4,990

4.2.2. Electricity Emissions By Land Use - Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	4,194
General Office Building	—	—	—	—	—	—	—	—	—	—	16,337
Hotel	—	—	—	—	—	—	—	—	—	—	7,532
Health Club	—	—	—	—	—	—	—	—	—	—	460
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	1,180
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	435
Total	—	—	—	—	—	—	—	—	—	—	30,137
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	4,194
General Office Building	—	—	—	—	—	—	—	—	—	—	16,337
Hotel	—	—	—	—	—	—	—	—	—	—	7,532
Health Club	—	—	—	—	—	—	—	—	—	—	460
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	1,180
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	435
Total	—	—	—	—	—	—	—	—	—	—	30,137
Annual	—	—	—	—	—	—	—	—	—	—	—

Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	694
General Office Building	—	—	—	—	—	—	—	—	—	—	2,705
Hotel	—	—	—	—	—	—	—	—	—	—	1,247
Health Club	—	—	—	—	—	—	—	—	—	—	76.1
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	195
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	72.1
Total	—	—	—	—	—	—	—	—	—	—	4,990

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	0.02	0.36	0.30	< 0.005	0.03	—	0.03	0.03	—	0.03	427
General Office Building	0.19	3.54	2.98	0.02	0.27	—	0.27	0.27	—	0.27	4,239
Hotel	0.15	2.68	2.25	0.02	0.20	—	0.20	0.20	—	0.20	3,211
Health Club	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	345
Quality Restaurant	0.03	0.59	0.50	< 0.005	0.04	—	0.04	0.04	—	0.04	706
Movie Theater (No Matinee)	0.02	0.27	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	327
Total	0.43	7.73	6.50	0.05	0.59	—	0.59	0.59	—	0.59	9,253
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—

Regional Shopping Center	0.02	0.36	0.30	< 0.005	0.03	—	0.03	0.03	—	0.03	427
General Office Building	0.19	3.54	2.98	0.02	0.27	—	0.27	0.27	—	0.27	4,239
Hotel	0.15	2.68	2.25	0.02	0.20	—	0.20	0.20	—	0.20	3,211
Health Club	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	345
Quality Restaurant	0.03	0.59	0.50	< 0.005	0.04	—	0.04	0.04	—	0.04	706
Movie Theater (No Matinee)	0.02	0.27	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	327
Total	0.43	7.73	6.50	0.05	0.59	—	0.59	0.59	—	0.59	9,253
Annual	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	< 0.005	0.07	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	70.6
General Office Building	0.04	0.65	0.54	< 0.005	0.05	—	0.05	0.05	—	0.05	702
Hotel	0.03	0.49	0.41	< 0.005	0.04	—	0.04	0.04	—	0.04	532
Health Club	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	57.1
Quality Restaurant	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	117
Movie Theater (No Matinee)	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	54.1
Total	0.08	1.41	1.19	0.01	0.11	—	0.11	0.11	—	0.11	1,532

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—

Regional Shopping Center	0.02	0.36	0.30	< 0.005	0.03	—	0.03	0.03	—	0.03	427
General Office Building	0.19	3.54	2.98	0.02	0.27	—	0.27	0.27	—	0.27	4,239
Hotel	0.15	2.68	2.25	0.02	0.20	—	0.20	0.20	—	0.20	3,211
Health Club	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	345
Quality Restaurant	0.03	0.59	0.50	< 0.005	0.04	—	0.04	0.04	—	0.04	706
Movie Theater (No Matinee)	0.02	0.27	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	327
Total	0.43	7.73	6.50	0.05	0.59	—	0.59	0.59	—	0.59	9,253
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	0.02	0.36	0.30	< 0.005	0.03	—	0.03	0.03	—	0.03	427
General Office Building	0.19	3.54	2.98	0.02	0.27	—	0.27	0.27	—	0.27	4,239
Hotel	0.15	2.68	2.25	0.02	0.20	—	0.20	0.20	—	0.20	3,211
Health Club	0.02	0.29	0.24	< 0.005	0.02	—	0.02	0.02	—	0.02	345
Quality Restaurant	0.03	0.59	0.50	< 0.005	0.04	—	0.04	0.04	—	0.04	706
Movie Theater (No Matinee)	0.02	0.27	0.23	< 0.005	0.02	—	0.02	0.02	—	0.02	327
Total	0.43	7.73	6.50	0.05	0.59	—	0.59	0.59	—	0.59	9,253
Annual	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	< 0.005	0.07	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	70.6
General Office Building	0.04	0.65	0.54	< 0.005	0.05	—	0.05	0.05	—	0.05	702
Hotel	0.03	0.49	0.41	< 0.005	0.04	—	0.04	0.04	—	0.04	532

Health Club	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	57.1
Quality Restaurant	0.01	0.11	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	117
Movie Theater (No Matinee)	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	54.1
Total	0.08	1.41	1.19	0.01	0.11	—	0.11	0.11	—	0.11	1,532

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	377
General Office Building	—	—	—	—	—	—	—	—	—	—	2,200
Hotel	—	—	—	—	—	—	—	—	—	—	237
Health Club	—	—	—	—	—	—	—	—	—	—	33.9
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	133
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	96.9
Total	—	—	—	—	—	—	—	—	—	—	3,077
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	377

General Office Building	—	—	—	—	—	—	—	—	—	—	2,200
Hotel	—	—	—	—	—	—	—	—	—	—	237
Health Club	—	—	—	—	—	—	—	—	—	—	33.9
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	133
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	96.9
Total	—	—	—	—	—	—	—	—	—	—	3,077
Annual	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	62.3
General Office Building	—	—	—	—	—	—	—	—	—	—	364
Hotel	—	—	—	—	—	—	—	—	—	—	39.3
Health Club	—	—	—	—	—	—	—	—	—	—	5.61
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	22.0
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	16.1
Total	—	—	—	—	—	—	—	—	—	—	509

4.4.2. Mitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	377

General Office Building	—	—	—	—	—	—	—	—	—	—	2,200
Hotel	—	—	—	—	—	—	—	—	—	—	237
Health Club	—	—	—	—	—	—	—	—	—	—	33.9
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	133
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	96.9
Total	—	—	—	—	—	—	—	—	—	—	3,077
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	377
General Office Building	—	—	—	—	—	—	—	—	—	—	2,200
Hotel	—	—	—	—	—	—	—	—	—	—	237
Health Club	—	—	—	—	—	—	—	—	—	—	33.9
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	133
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	96.9
Total	—	—	—	—	—	—	—	—	—	—	3,077
Annual	—	—	—	—	—	—	—	—	—	—	—
Regional Shopping Center	—	—	—	—	—	—	—	—	—	—	62.3
General Office Building	—	—	—	—	—	—	—	—	—	—	364
Hotel	—	—	—	—	—	—	—	—	—	—	39.3
Health Club	—	—	—	—	—	—	—	—	—	—	5.61

Quality Restaurant	—	—	—	—	—	—	—	—	—	—	22.0
Movie Theater (No Matinee)	—	—	—	—	—	—	—	—	—	—	16.1
Total	—	—	—	—	—	—	—	—	—	—	509

5. Activity Data

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)
Regional Shopping Center	2,684,501	567	0.0489	0.0069	1,327,657
General Office Building	10,455,998	567	0.0489	0.0069	13,188,758
Hotel	4,820,818	567	0.0489	0.0069	9,990,258
Health Club	294,103	567	0.0489	0.0069	1,072,922
Quality Restaurant	754,975	567	0.0489	0.0069	2,195,833
Movie Theater (No Matinee)	278,673	567	0.0489	0.0069	1,016,631

5.11.2. Mitigated

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)
Regional Shopping Center	2,684,501	567	0.0489	0.0069	1,327,657
General Office Building	10,455,998	567	0.0489	0.0069	13,188,758
Hotel	4,820,818	567	0.0489	0.0069	9,990,258
Health Club	294,103	567	0.0489	0.0069	1,072,922
Quality Restaurant	754,975	567	0.0489	0.0069	2,195,833

Movie Theater (No Matinee)	278,673	567	0.0489	0.0069	1,016,631

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Regional Shopping Center	19,971,581	0.00
General Office Building	116,668,520	0.00
Hotel	12,581,918	0.00
Health Club	1,795,763	0.00
Quality Restaurant	7,035,911	0.00
Movie Theater (No Matinee)	5,141,503	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Regional Shopping Center	19,971,581	0.00
General Office Building	116,668,520	0.00
Hotel	12,581,918	0.00
Health Club	1,795,763	0.00
Quality Restaurant	7,035,911	0.00
Movie Theater (No Matinee)	5,141,503	0.00

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	LADWP Power Content Label 2022
Land Use	Energy Calculation