

Table 1 – Total Construction-Related Fuel Consumption

Chartwell Warehouse at Rider Street and Redlands Avenue

Fuel	Consumption	
Diesel		
On-Road Construction Trips ¹	8,754	Gallons
Off-Road Construction Equipment ²	26,807	Gallons
Diesel Total	35,560	Gallons
Gasoline		
On-Road Construction Trips ¹	11,653	Gallons
Off-Road Construction Equipment ³	-	Gallons
Gasoline Total	11,653	Gallons

Notes:

1. On-road mobile source fuel use based on vehicle miles traveled (VMT) from CalEEMod for construction in 2023 and fleet-average fuel consumption in gallons per mile from EMFAC2017 web based data for Riverside County. See Table 2 for calculation details.
2. Off-road mobile source fuel usage based on a fuel usage rate of 0.05 gallons of diesel per horsepower (HP)-hour, based on SCAQMD CEQA Air Quality Handbook, Table A9-3E.
3. All emissions from off-road construction equipment were assumed to be diesel.

Table 2 – On-Road Construction Trip Estimates

Chartwell Warehouse at Rider Street and Redlands Aven

Trip Type	Trips	Trip length	Vehicle Miles Traveled (VMT)	Fuel Efficiency	Annual Fuel Usage ¹	
	(trips)	(miles)	(miles)	(mpg)	(Fuel)	(gallon)
Worker ^{2,3}	23,740	14.7	348,978	29.3	Gasoline	11,653
Vendor ⁴	8,750	6.9	60,375	9.6	Diesel	6,598
Hauling ⁵	812	20	16,240	7.5	Diesel	2,156

Notes:

1. On-road mobile source fuel use based on vehicle miles traveled (VMT) from CalEEMod output (See Air Quality/GHG Memo) for construction and fleet-average fuel consumption in gallons per mile from EMFAC2017 web based data for 2023 in Riverside County.
2. Worker trips were assumed to be 100% gasoline powered vehicles.
3. Per CalEEMod, worker Trips were assumed to be 50% LDA, 25% LDT1, and 25% LDT2.
4. Vendor trips were assumed to be 50% MHDT and 50% HHDT, split evenly between the MHDT and HHDT construction categories.
5. Per CalEEMod, hauling trips were assumed to be 100% HHDT.

Table 3 – Annual Energy Consumption from Operation

Chartwell Warehouse at Rider Street and Redlands Avenue

Fuel Type	Energy Consumption	Units	Natural Gas	Units
Electricity				
Building ¹	371,561	kWh/year	266,964	kBTU/yr
Water ²	15,451	kWh/year		
EV Charging Stations ³	821,250	kWh/year		
Total Electricity	1,208,262	kWh/year		
Mobile⁴				
Gasoline	41,117	gallons/year		
Diesel	78,127	gallons/year		

Notes:

1. Building electricity use from CalEEMod output (See Air Quality/GHG Memo).
2. Calculated based on the Project's annual water consumption using CalEEMod SCAQMD energy intensity of 0.0111 kWh per gallon for supply, distribution, and treatment of water and 0.013021 kWh per gallon for supply, distribution, and treatment of water and wastewater treatment.
3. Five Electric Vehicle (EV) charging stations assumed. Per SCAQMD's Final Staff Report for Proposed Rule 2305 and Proposed Rule 316, May 2021, each charging station is assumed to have a 50 kW charger and daily usage is estimated at approximately 10 hours a day, or equal to approximately 450 kWh per day.
4. Mobile source fuel use based on annual vehicle miles traveled (VMT) from CalEEMod output for operational year 2024 and fleet-average fuel consumption in gallons per mile from EMFAC2017 web based data in Riverside County.