PERMIT REQUIREMENT
Load Calculation Document for Wattage to Amperage

	JONES
ConnectEV	Residence

Existing **200** Amp Service

Conditions: Adding One New 50 Amp circuit to Existing **200 Amp** Panel In the garage for a new **EV Charger**

(Based on the 2017 NEC 220.83)

	Existing plus Added Loads (less HVAC)		
2,549	sq. ft. @ 3 watts sq. ft	7647	watts
2	Small Appliance Circuits @ 1500 watts ea. **(Minimum is two)**	3000	watts
1	Laundry Circuit(s) @ 1500 watts ea. **(Minimum is one)**	1500	watts
1	Range	8000	watts
1	Water Heater	9600	watts
1	Dishwasher	900	watts
1	Disposal	600	watts
1	Garage	500	watts
1	Dryer	5000	watts
1	Pool Motor	2400	watts
1	Pool Heater	9600	watts
1	Microwave	900	watts
1	EV CHARGER	9600	watts
		0	watts
		0	watts
		0	watts
		0	watts
		0	watts
		0	watts
	Total Calculated Load (less HVAC)	**59247**	**watts**

HVAC Load

Compute the HVAC load and enter the LARGER of these air-conditioning or space heating loads.

⚠	Air Conditioning Load (Volts X Amps = Watts)	10750	watts
	Furnace/Air Handler (Volts X Amps = Watts)		
	OR		
⚠	Electric Space Heating Load (Volts X Amps = Watts) (Central electric furnace, electric baseboard heaters, ceiling radiant heat, etc.)		watts
	OR		
⚠	Heat Pump with Central Electric Furnace (Volts X Amps = Watts) (Nameplate rating of heat pump compressor plus electric furnace)		watts
	HVAC Load	**10750**	**watts**

Service Demand

Total Computed Load (NEC 220.83)

	First 10kw of Total Calculated Load (less HVAC) @ 100%	10000	watts
	Remainder of Total Calculated Load (less HVAC) @ 40%	19698.8	watts
	HVAC Load @ 100%	10750	watts
	Calculated Service Load	**40448.8**	**watts**

Calculated Service Load			Service Voltage		=	Minimum Service Ampacity	
40448.8	watts	/	240	volts	=	**168.54**	**amps**