



City of Corona

Planning & Development Department

Building (Plan Check & Inspection)

Electric Vehicle Charging Stations: Expedited Online Permits

To be eligible for expedited online submittal and plan check, an applicant for an electric vehicle charging station permit must provide this completed application and checklist, along with the plans in PDF file format (plans must conform to these guidelines to be eligible for expedited review), and pay the required plan check fees through the eTrakit permit system at www.CoronaCA.gov/Permits. The permit type selected should be "Expedited" and the plan check fees must be paid prior to plan review. The applicant shall coordinate the project with the applicable utility company and process any of their required plans, forms, or fees. Please see exhibit at the end of these guidelines for a map of areas served by the City of Corona Utilities Department.

Application

Project Address: _____

Electric service provider: Southern California Edison (SCE) ☐
City of Corona Utilities Department ☐
(See requirements in these guidelines for DWP customers)

Type of Project: Single Family Residential ☐ Multifamily/Commercial/Industrial ☐

Number of Chargers Installing: _____

Type of Charger: AC ☐ DC ☐

Voltage: _____ **Amps:** _____

Scope of Work: ☐ Plug EVCS into existing 120V, 15 or 20 Amp receptacle (no permit required, however please consult with a licensed professional)
☐ Extend existing circuit and add outlet (see guidelines for load calculations)
☐ Add dedicated EV circuit

Proposed electric service panel size (Amps): _____

Panel upgrade required: No ☐ Yes ☐ (Separate Building Permit and fees required)

Line side tap or Second electric meter: No ☐ Yes ☐ (Requires additional fees and for DWP customers, separate application and review)

Mechanical ventilation required: No ☐ Yes ☐ (Separate Building Permit and fees required)

Applicant Name:
Applicant Address:
Applicant Phone:
Applicant Email:

Checklist and Guidelines

Plans for a proposed EVCS shall include at a minimum the following:

1. Site Vicinity Plan
2. Overall Site Plan
3. Enlarged Site Plan or Floor Plan
4. Single Line Diagram
5. Panel Schedules
6. Electrical Load Calculations
7. Charger and equipment manufacturer's specification sheets
8. Details, Elevation Views, and Mechanical Plans as needed

All sheets shall include a title block indicating the project address, designer, dates of plan revisions and other relevant information, and shall be numbered (example: 1 of 12). All sheets shall be stamped and signed by a California licensed electrical engineer or a California licensed C-10 electrical contractor. The signature may be electronic. The installation shall comply with all codes in effect and the plans must list the applicable codes, e.g. 2022 California Electrical Code, 2022 California Building Code, etc.

1. □ Site Vicinity Plan - Must show the location of the project in the city, in relation to city boundary lines, major roadways, and nearest cross streets.

Note: The City of Corona does not serve the communities of El Cerrito, Home Gardens, Coronita, or Temescal Canyon (under County jurisdiction.) Addresses may be verified to be within city limits by clicking [here](#).

2. □ Overall Site Plan - Must depict the entire site and show the location on the property where all work will be performed. Must be dimensioned and show all structures, accessible paths of travel, parking spaces, circulation paths, location of equipment, driveways, etc. If a multifamily/commercial/industrial project, parking calculations must be provided and must indicate compliance with CBC Chapter 11 Accessibility requirements and CAL Green Mandatory Measures.

3. □ Enlarged Site Plan or Floor Plan – Must be dimensioned and show the proposed location of the EVCS and related equipment and their working space, electrical panels, disconnects, EV parking spaces, signage, conduits, outlets, fans, bollards if electrical equipment is located in the path of a vehicle, access aisles, doorways, and paths of travel. EV supply equipment rated more than 60 amps or more than 150 volts shall have a readily accessible disconnect, capable of being locked open, within site of the equipment.

4. □ Single Line Diagram - Must indicate size and rating of existing and proposed service(s), voltage configuration, etc. Must show all panels and equipment and indicate their size and rating; overcurrent protective device ratings for all circuits and panels supplying EVSE; conductor type, size, and material feeding EVCS and include ampacity derating calculations for any conditions that may apply; conduit type, size, and material with conduit fill calculations; how grounding of all equipment is to be provided including the number, type, and size of grounding electrodes and conductors. For multifamily/commercial/industrial projects, fault current ratings of all equipment shall be indicated and shall be fully rated or calculations shall be provided for series rated systems. Meters for EVSE need to be labeled with the same address as the building installed at along with the designation EV (for example, “200 S. Main St. EV”).

5. □ Panel Schedules – Must be provided for all electrical panels supplying power to the EVCS. Must indicate the panel’s name/ID, voltage, ampacity, and AIC ratings. Must indicate the name and number of all new and existing circuits and their corresponding ampacity. Existing panels must have space available for an additional breaker(s). *For single family dwelling projects only, the attached Panel Schedule Template may be used and attached with the submittal.*

6. □ Electrical Load Calculations - Must be provided for all panels supplying power to the EVCS. Must clearly indicate how compliance is achieved with CEC Article 220. Overcurrent protection devices for feeders and circuits supplying EVCS shall be rated for continuous duty and shall be rated for not less than 125% of the maximum load of the EV supply equipment. Where noncontinuous loads are supplied from the same feeder or branch circuit, the overcurrent device shall be rated for 100% of the noncontinuous loads plus 125% of the continuous loads. *For single family dwelling projects only, the attached Electrical Load Worksheet may be used and attached with the submittal.*

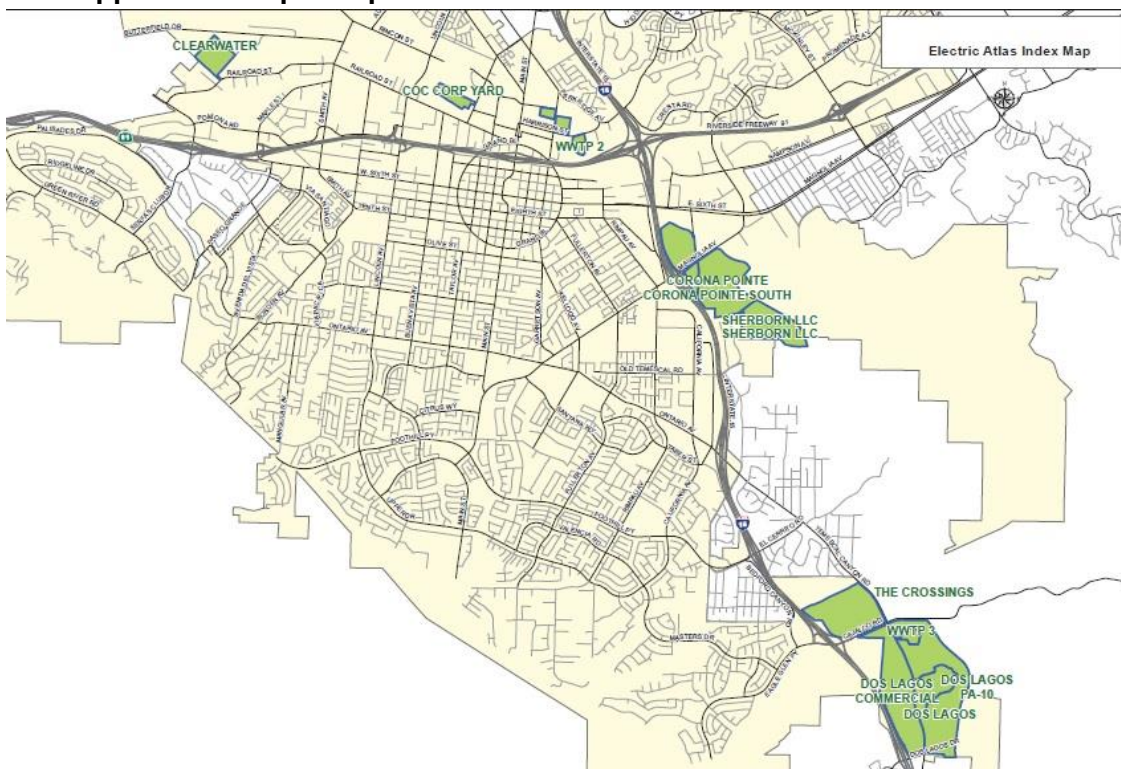
7. □ Charger Manufacturer’s Specifications – Cut sheets must be provided for all equipment installed for the EVCS indicating their size, rating, listing, environment rated for, etc. The manufacturer’s installation instructions for all equipment must be provided on the jobsite.

8. □ Details, Elevations, and Mechanical Plans - May be needed depending on the scope and complexity of the EVSE project. Trenching details must be provided indicating the depth of cover for underground conduits (CEC Table 300.5). Structural details may be provided for equipment mounting, and are required for trenching undermining foundations. Details or Elevations must be provided for multifamily/commercial/industrial projects indicating the height of connector coupling means and other operable parts (CEC 625.50 and CBC 11B-812.2). Mechanical Plans may be needed if ventilation is required for the type of EVSE being installed showing compliance with CEC Article 625.50, the California Mechanical Code, and California Building Code.

City of Corona Utilities Department

Below is a map that shows general areas of the city that have electrical service provided by the City of Corona Utilities Department. If your EVCS project is within the City of Corona Utilities service area, please contact the Utilities Department at 951-736-2234. To verify the serving utility or to obtain more information about the Utilities Department application and interconnection process please contact them at 951-736-2234. An interactive map is available by clicking [here](#).

Note: The “Tesla Backup Switch” and similar devices installed in the City of Corona Utilities Department electric service areas are not permitted to be installed in the main service panel or attached to the utility meter. These types of devices shall be installed in a separate panel/meter enclosure downstream of the main service panel. City of Corona Utilities Department approval is required prior to installation.



By signing below, the applicant confirms that they have read and understood the above guidelines, has verified that the plans conform to the above requirements and are eligible to receive expedited review, has verified the project is within city limits, has verified the serving electric utility and that the plans conform to the utility's interconnect policies, acknowledges that the standard review process is available for projects not eligible for expedited review, and affirms that all information provided is true and accurate.

Signature: _____ **Date:** _____

Note: The City's EVCS ordinance, this application and checklist were developed pursuant to the full criteria of AB 1236. Projects that meet the streamlined permitting criteria are administratively approved through a non-discretionary building permit. EVCS project reviews are limited to health and safety requirements found under local, state, and federal law. The City of Corona accepts electronic signatures on plans and permit applications. Approvals by the City of Corona are not subject to approval by an association (as defined in Section 4080 of the Civil Code.) The City issues a comprehensive plan check comment list detailing all deficiencies needed to be eligible for expedited permit issuance.



Electrical Load Worksheet

The following worksheet may be used to calculate electrical loads for EVCS installed at *existing Single Family Dwellings only*. For other occupancies or projects with different scopes of work, load calculations are required to be prepared by a licensed electrical engineer or electrical contractor displaying conformance with the applicable code requirements and load calculation methodology.

INSTRUCTIONS: Review the list of electrical loads in the table below and check (✓) all that exist in the home. For each item checked, fill in the corresponding "Watts Used" (refer to the "Typical Usage" column.) If multiple instances of the load exist be sure to multiply the load by the number of instances. Add up all of the numbers in the "Watts Used" column and write that number in the "TOTAL WATTS" space at the bottom of the table.

Loads shown are estimates; actual loads may vary. For a more accurate analysis, use the nameplate ratings of appliances and other loads and calculate each phase independently. This is a simplified, voluntary compliance alternative and the applicant may wish to consult with a licensed electrical professional. Use of this electrical load calculation worksheet is at the user's risk and carries no implied warranty or guarantee of accuracy. This worksheet assumes that the existing electrical system at the premises is code-compliant and sized appropriately.

Check All Applicable Loads	Description of Load	Typical Usage	Watts Used
GENERAL LIGHTING AND RECEPTACLE OUTLET CIRCUITS			
✓	Multiply the dwelling square footage by 3	3 watts/sq. ft.	
KITCHEN CIRCUITS			
✓	Kitchen circuits	3,000 watts	3,000 (minimum)
	Electric oven	2,000 watts	
	Electric stove top	5,000 watts	
	Microwave	1,500 watts	
	Garbage disposal under kitchen sink	1,000 watts	
	Automatic dishwasher	3,500 watts	
	Garbage compactor	1,000 watts	
	Instantaneous hot water at sink	1,500 watts	
LAUNDRY CIRCUIT			
✓	Laundry circuit	1,500 watts	1,500 (minimum)
	Electric clothes dryer	5,000 watts	
HEATING AND AIR CONDITIONING CIRCUITS			
	Central heating (gas) and air conditioning	6,000 watts	
	Window mounted A/C	1,000 watts	
	Whole-house or attic fan	500 watts	
	Evaporative cooler	500 watts	
OTHER ELECTRICAL LOADS			
	Electric water heater (storage type)	4,000 watts	
	Electric tankless water heater	15,000 watts	
	Swimming pool or spa	3,500 watts	
	Other (describe):		
	Other:		
	Other:		
ELECTRIC VEHICLE CHARGER CIRCUIT			
✓	EVCS rating in Amps X 125% X Volts		

TOTAL WATTS = _____

To determine the minimum size service panel and main service breaker needed (measured in amps), take Total Watts from above and divide by 240. Example: 30,000 watts / 240 volts equals 125 amp main service needed. (Note: For a more accurate analysis, calculate each leg based on it's nominal voltage independently.)

Size of existing Main Service Breaker = _____ **Size needed from calculation above =** _____



CITY OF CORONA BUILDING DIVISION

TEMPLATE OF A RESIDENTIAL ELECTRICAL PANEL UPGRADE

*** complete and submit to inspector at the time of permit final

PERMIT #

OWNER:

ADDRESS:

PANELBOARD SCHEDULE ____ VOLT MAIN BREAKER SIZE ____ AMP											
CKT		VA		BRKR		CKT		VA		BRKR	
NO	USAGE	QTY	PHASE A	A/ PLS	NO	USAGE	QTY	PHASE A	A/ PLS		
1					2						
3					4						
5					6						
7					8						
9					10						
11					12						
13					14						
15					16						
17					18						
19					20						
21					22						
23					24						
25					26						
	PHASE VA SUBTOTALS		0			PHASE VA SUBTOTALS		0			
						PHASE VA TOTALS		0			
						PANEL BOARD VA TOTAL					
						I.C.L. (25%)					
						PANELBOARD AMPS TOTAL					
* Indicates GFI type circuit breaker EQUIPMENT TAG LOCATION VOLTAGE MAIN BREAKER BUS SIZE MOUNTING TYPE PHASE WIRE											