



## CITY OF MERCED INSPECTION SERVICES

# CHECKLIST FOR ELECTRICAL VEHICLE CHARGING SYSTEMS

All forms available at <https://www.cityofmerced.org/departments/development-services/building-division>

- Completed Application
- Electrical Service Load Calculations
- Equipment Manufacturer's Installation Instructions
- Site Plan and Layout for location

### Use of Building Area

- Single Family    Multi-family    Commercial (Single Business)    Commercial (Multi Businesses)
- Mixed-Use    Public Right of Way

### Location and Quantity of EVSE to be Installed

Garage \_\_\_\_\_ Parking Levels \_\_\_\_\_ Parking Lot \_\_\_\_\_ Street Curb \_\_\_\_\_

**PROVIDE ON LAYOUT/SITE PLAN**

### Electronic Submittal Requirements

- PDF files of forms listed above
- Email all PDF files to [inspectionsservicesweb@cityofmerced.org](mailto:inspectionsservicesweb@cityofmerced.org)

## **Eligibility Checklist for Expedited Electrical Vehicle Charging Station Permit** *(\*Please complete a Permit Submittal Application in addition to this checklist)*

Type of Charging Station(s)	Power Levels (proposed circuit rating)	Check one
Level 1	110/120 volt alternating current (VAC) at 15 or 20Amps	<input type="checkbox"/>
Level 2 – 3.3 kW (low)	208/240 VAC at 20 or 30 Amps	<input type="checkbox"/>
Level 2 – 6.6 kW (medium)	208/240 VAC at 40 Amps	<input type="checkbox"/>
Level 2 – 9.6 kW (high)	208/240 VAC at 50 Amps	<input type="checkbox"/>
Level 2 – 19.2 kW (highest)	208/240 VAC at 100 Amps	<input type="checkbox"/>
Other (Provide Detail): _____	Provide Rating: _____	<input type="checkbox"/>



## CITY OF MERCED INSPECTION SERVICES

### Permit Application Requirements:

A. Does the application include EVCS manufacturer's specs and installation guidelines?	Y <input type="checkbox"/>	N <input type="checkbox"/>
--	----------------------------	----------------------------

### Electrical Load Calculation Worksheet:

A. Is an electrical load calculation worksheet included? ( <b>CEC 220</b> )	Y <input type="checkbox"/>	N <input type="checkbox"/>
B. Based on the load calculation worksheet, is a new electrical service panel upgrade required?	Y <input type="checkbox"/>	N <input type="checkbox"/>
1) If yes, do plans include the electrical service panel upgrade?	Y <input type="checkbox"/>	N <input type="checkbox"/>
C. Is the charging circuit appropriately sized for a continuous load of 125%?	Y <input type="checkbox"/>	N <input type="checkbox"/>
D. If changing equipment proposed is a Level 2 – 9 kW station with a circuit rating of 50 Amps or higher, is a completed panel schedule with electrical calculations included with the single line diagram?	Y <input type="checkbox"/>	N <input type="checkbox"/>

### Site Plan-Floor Plan and Single Line Drawing:

A. Is a site plan (Commercial only), floor plan and separate electrical plan with a single-line diagram included with the permit application?	Y <input type="checkbox"/>	N <input type="checkbox"/>
1) If mechanical ventilation requirements are triggered for indoor venting requirements ( <b>625.52</b> ), is mechanical plan included with the permit application?	Y <input type="checkbox"/>	N <input type="checkbox"/>
B. Is the site plan fully dimensioned and drawn to scale? (Commercial only)	Y <input type="checkbox"/>	N <input type="checkbox"/>
1) Showing location, size, and use of all structures?	Y <input type="checkbox"/>	N <input type="checkbox"/>
2) Showing location of electrical panel to charging system?	Y <input type="checkbox"/>	N <input type="checkbox"/>
3) Showing type of charging system and mounting?	Y <input type="checkbox"/>	N <input type="checkbox"/>
4) Is the project located in the 100 year flood plain?	Y <input type="checkbox"/>	N <input type="checkbox"/>

### Compliance with 2019 California Electrical Code:

A. Does the plan include EVCS manufacturer's specs and installation guidelines?	Y <input type="checkbox"/>	N <input type="checkbox"/>
B. Does the electrical plan identify the amperage and location of existing electrical service panel?	Y <input type="checkbox"/>	N <input type="checkbox"/>
1) If yes, does the existing panel schedule show room for additional breakers?	Y <input type="checkbox"/>	N <input type="checkbox"/>
C. Is the Charging unit rated more than 60 amps or more than 150V to ground?	Y <input type="checkbox"/>	N <input type="checkbox"/>
1) If yes, are disconnecting means provided in a readily accessible location in line of site and within 50' of EVCS? ( <b>CEC 625.43</b> )	Y <input type="checkbox"/>	N <input type="checkbox"/>
D. Does the charging equipment have a Nationally Recognized Laboratory (NRTL) approved listing mark? (UL 2202/UL 2200)	Y <input type="checkbox"/>	N <input type="checkbox"/>
E. If trenching is required, is the trenching detail called out?	Y <input type="checkbox"/>	N <input type="checkbox"/>
1) Is the trenching in compliance with electrical feeder requirements from structure to structure? ( <b>CEC 225</b> )	Y <input type="checkbox"/>	N <input type="checkbox"/>
2) Is the trenching in compliance with minimum cover requirements for wiring methods or circuits? (18" for direct burial per <b>CEC 300</b> )	Y <input type="checkbox"/>	N <input type="checkbox"/>



## CITY OF MERCED INSPECTION SERVICES

### Compliance with the 2019 California Green Building Standards Code (CGBSC):

A. Does the CAL Green EV Readiness installation requirements apply to this project?	Y <input type="checkbox"/>	N <input type="checkbox"/>
1) Do the plans demonstrate conformance with <b>CGBSC Table 5.106.5.3.3</b> for the minimum required number of charging spaces?	Y <input type="checkbox"/>	N <input type="checkbox"/>
2) Do the construction plans comply with the design requirements set forth in <b>CGBSC 5.106.5.31</b> for single charging spaces of <b>CGBSC 5.106.5.3.2</b> for multiple charging spaces?	Y <input type="checkbox"/>	N <input type="checkbox"/>

### Compliance with 2019 California Building Code, Chapter 11-A/B Accessibility Features:

A. Do the plans clearly depict all required accessible EVCS features for the disabled?	Y <input type="checkbox"/>	N <input type="checkbox"/>
1) Do the plans identify the correct number and type of accessible EVCS stalls required in accordance with <b>Table 11B-228.3</b> ?	Y <input type="checkbox"/>	N <input type="checkbox"/>
2) Do the plans detail compliance with the accessible EVCS features required by <b>11B-812</b> and <b>Figure 11B-812.9</b> ?	Y <input type="checkbox"/>	N <input type="checkbox"/>

#### EVSE Location and Metering

Proposed EVSE location may not be located over any underground utility facilities, equipment, and/or infrastructure. Also, a dedicated meter may be required on any EVSE.

I hereby acknowledge that the information presented is a true and correct representation of existing conditions at the job site and that any causes for concern as to life-safety verifications may require further substantiation of information. I also acknowledge that nothing herein shall modify or remove my obligation as a permit applicant, owner, or operator of an electric vehicle charging station to comply with any electric utility's reasonable and feasible safety, reliability, and engineering interconnection policies.

Signature of Permit Applicant: \_\_\_\_\_ Date: \_\_\_\_\_