PERMIT INFORMATION: Electric vehicle charging stations (EVCS) must be installed in accordance with manufacturer’s installation instructions and in accordance with the 2019 California Electrical Code (CEC). Wiring methods in Chapter 3 of the CEC must be applied to each installation. The EVCS must be listed by a nationally recognized testing laboratory (NRTL).

PLAN SUBMITTAL REQUIREMENTS: Complete sets of building plans/reports and documents are required for the plan check of the proposed construction. All dimensions and scales shall be clearly indicated on the plans.

FORMS REQUIRED AT SUBMITTAL:
- Building Permit Application
- Limitations Form
- Owner/Builder Form or Contractor’s Information Page (& Authorized Agent Form if required)
- Completed form AB1236
- Submittal payment cash/check (dependent on scope of work and required inspections)

SUBMITTAL REQUIREMENTS:
- Three (3) Sets of Floor Plans, 8 ½” x 11” minimum size
- Two (2) Sets of the Manufacturer’s Installation Instructions.
- Two (2) Copies of the Property’s Electrical Service Load Calculations per CEC Article 220.
- Property Information - Address of Property and Name, Address, Contact Phone Number of Property Owner; Applicable Codes; Occupancy and Type of Construction and Description and Scope of Work.
- Site plans showing the location of the building, street, all charging stations, electric service, conduit location and disconnects.
- A single line diagram must be included in the submittal with the following information; Conductor types and sizes, size of the over current device (circuit breaker) supplying the EVCS, conduit size, type and location, the manufacturer and model of the charging stations, the size of the main electric panel, distribution panels (sub panels) and disconnects.
- Type charging station (Level 1,2, or 3)
- A lockable disconnect is required in a readily accessible location (CEC 625.42) for EV charging stations > 60A or 150V to ground.

GENERAL INSTALLATION GUIDELINES FOR LEVEL 2 RESIDENTIAL EV CHARGERS:

1. GENERAL REQUIREMENTS - All Electrical Vehicle Charging Systems shall comply with the applicable sections of the 2019 California Electrical Code, including Article 625.

2. EQUIPMENT HEIGHT - The coupling means of the Electric Vehicle Supply Equipment shall be stored at a height of 18 inches minimum above the finished floor (CEC Art 625.50).

3. LISTED EQUIPMENT - All Electric Vehicle Supply Equipment shall be listed by a nationally recognized testing laboratory.
4. PROTECTION FROM PHYSICAL DAMAGE - Electrical Vehicle Supply Equipment shall be protected against vehicle impact damage when located in the path of a vehicle. In order to avoid the installation of a substantial pipe bollard as an equipment guard, locate the Electrical Vehicle Supply Equipment on a garage side wall, out of vehicular path. (See sample drawing below) (CEC Art. 110.27(B))

5. IF MORE THAN 60 AMPS - When EV charging equipment is rated at more than 60 amps, the disconnect means shall be provided and installed in a readily accessible location and shall be lockable open in accordance with 110.25. (CEC Art. 625.42)

6. EXISTING ELECTRICAL SYSTEMS - Verification that the existing main service panel and all panels in the electrical system used for the EVCS are safe and free of electrical hazards. If electrical violations or hazards are present the Owner/Contractor will be required to have a licensed contractor correct the violations and/or hazards. Damaged equipment must be replaced or repaired and will require permits and inspections.

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**SAMPLE ELECTRICAL PLAN FOR LEVEL 2 ELECTRIC VEHICLE CHARGER CIRCUIT INSTALLATION**

**SAMPLE PROJECT DESCRIPTION:**

Installation of a new 40 AMP circuit for a Level 2 Electric Vehicle Charger per manufacturer’s installation instructions and California electrical code.

Vehicle batteries listed as suitable for charging indoors without ventilation.

Minimum service panel size to be in accordance with the residential EV charger guidelines.