



Electric Vehicle Charging Station Submittal Checklist

CITY OF SOUTH SAN FRANCISCO, CALIFORNIA – BUILDING DIVISION

Electric Vehicle Charging Stations General Permit Information:

The City of South San Francisco provides an expedited, streamlined permitting process for electric vehicle charging stations (EVCS) pursuant to California Government Code Section 65850.7 and South San Francisco Municipal Code Chapter 15.64. EVCS permit review and processing can be completed through the City of South San Francisco Building Inspection web portal <https://permits.ssf.net> and by following the instructions provided at <https://www.ssf.net/departments/economic-community-development/building-division/plan-submittal-permit-requirements>

Electric vehicle charging station equipment shall meet the requirements of the California Electrical Code, the Society of Automotive Engineers, the National Electrical Manufacturers Association, and accredited testing laboratories such as Underwriters Laboratories, and rules of the Public Utilities Commission or a Municipal Electric Utility Company regarding safety and reliability.

It is highly recommended that applicants obtain approval from their HOA prior to applying for permit. Proof of HOA approval is not required for the permit process.

Additional installation requirements include the following:

- Installation of electric vehicle charging stations and associated wiring, bonding, disconnecting means and overcurrent protective devices shall meet the requirements of Article 625 and all applicable provisions of the California Electrical Code.
- Installation of electric vehicle charging stations shall be incorporated into the load calculations of all new or existing electrical services and shall meet the requirements of the California Electrical Code. Electric vehicle charging equipment shall be considered a continuous load.
- Anchorage of either floor-mounted or wall-mounted electric vehicle charging stations shall meet the requirements of the California Building or Residential Code as applicable per occupancy, and the provisions of the manufacturer's installation instructions. Mounting of charging stations shall not adversely affect building elements.

The "Plug-In Electric Vehicle Infrastructure Permitting Checklist" of the "Zero-Emission Vehicles in California: Community Readiness Guidebook" as published by the Governor's Office of Planning and Research may be utilized and incorporated into the charging station design. Please check the State's website of updates to guidelines. The Guidelines are available at: <http://opr.ca.gov>

Subject:

Applicable Building Codes:

All work shall comply with the following codes:

2019 California Fire Code	2019 Building Energy Efficiency Standards
2019 California Building Code	2019 California Existing Building Code
2019 California Existing Building Code	2019 California Electrical Code
2019 California Mechanical Code	2019 California Plumbing Code
2019 California Green Building Code	2019 California Residential Code

Health and Safety Requirements:

The applicant shall verify that the installation of an electric vehicle charging station will not have specific, adverse impact to public health and safety and building occupants. Documentation required to be submitted by the applicant includes but is not limited to: identifying electrical system capacity and loads; electrical system wiring, bonding, and overcurrent protection; building infrastructure affected by charging station equipment and associated conduits; charging station equipment location and vehicle parking, conformance to all required accessibility requirements per CBC chapter 11A or 11B for commercial installations.

If the Building Official makes a finding based on substantial evidence that the electric vehicle charging station could have a specific adverse impact upon the public health or safety, as defined in this chapter, the City may require the applicant to apply for a Use Permit. If the Building Official determines that the permit application is incomplete, a written correction notice will be issued to the applicant, detailing all deficiencies in the application and any additional information required to be eligible for expedited permit issuance.

Application approval / permit issuance does not authorize an applicant to energize or utilize the electric vehicle charging station, unless and until an inspection is performed and approval is granted by the City and the utility carrier as necessary.

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
- Owner/Builder Form, *if applicable*

Subject:

Submittal Requirements:

- Floor Plans.
- Manufacturer's Installation Instructions.
- Property's Electrical Service Load Calculations per CEC Article 220. Be sure to include the EV Unit in the Calculation. (Electronic submission)

The following are guidelines for preparation and submittal of your plans. Specific plan requirements will depend largely upon the extent, nature, and complexity of the work to be done:

- 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, existing trees, 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)
- Electrical Load Calculation Sheet: Provide size of the existing electrical panel, existing load on the panel, and proposed load/circuits from the electric vehicle charging system to determine if there is adequate capacity in the existing panel (CEC 220).
- A lockable disconnect is required in a readily accessible location (*CEC 625.42*) for EV charging stations > 60A or 150V to ground. A phenolic plaque with red background and white letter stating "Emergency Power Off – Electric Vehicle Charging Station" must be installed on each disconnect.
- Attachment detail for post/bollard installations where protection of electrical equipment is required.
- Second services may only be applied for with special permission from the city and from the utility provider.
- For Commercial applications provide all accessibility requirements per CBC Chapter 11a or 11b.

Subject:

General Requirements:

- 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 have to have a licensed electrical contractor correct the violations and/or hazards. Damaged equipment must be replaced or repaired and will require permits and inspections.
- The electric vehicle charging system shall be listed by a nationally recognized testing laboratory (i.e., UL) in compliance with UL 2202 “Standard for Electric Vehicle (EV) Charging System Equipment.” (CEC 90.7)
- The electric vehicle charging system shall be installed in accordance with manufacturer’s guideline and shall be suitable for the environment (indoor/outdoor).
- If the electric vehicle charging equipment is located in an area subject to vehicular damage, an adequate barrier must be installed (e.g., 4” diameter steel pipe filled with concrete, a minimum of 40” above the finished floor/grade, installed in a footing measuring 12” in diameter and 3’ deep). (CEC 110.27)
- If a separate meter will be installed for the electric vehicle charger, it shall be placed between 48” and 66” above the ground. Additionally, if a single mast will continue to be used to serve the meters, ensure that the service entrance conductors shall be sized for the sum of the two meters, based on the table below (CEC Table 310.15(b)(7)(1) thru (4) and Chapter 9 Table 1):

SERVICE ENTRANCE CONDUCTORS SIZE AND RATING			
Service or Feeder	Copper Conductor	Aluminum or Copper- Clad	Minimum Conduit
100 AMPS	#4 AWG	#2 AWG	1 ¼ Inch
125 AMPS	#2 AWG	#1/0 AWG	1 ¼ Inch
150 AMPS	#1 AWG	#2/0 AWG	1 ¼ Inch
200 AMPS	#2/0 AWG	#4/0 AWG	1 ½ Inch

- Fees: Refer to the current Master Fee Schedule as additional fees may apply:
- Permit Application Fee
- Plan Review Fee
- Electrical Permit Fee
- Document Imaging Fee

Additional Information:

- A Building Permit may be issued only to a State of California Licensed Contractor or the Homeowner. If the Homeowner hires workers, State Law requires the Homeowner obtain Worker’s Compensation Insurance.
- When a permit is required for an alteration, repair or addition exceeding one thousand dollars (\$1,000.00) to an existing dwelling unit that has an attached garage or fuel-burning appliance, the dwelling unit shall be provided with a Smoke Alarm and Carbon Monoxide Alarm in accordance with the currently adopted code.

Inspections:

- A final inspection is required after all the work has been completed. The property owner shall complete and give to the inspector at final, the “Affidavit Self-Certification for Compliance of Smoke and Carbon Monoxide Detectors” form, verifying that they have installed the required smoke and carbon monoxide detectors in their home/property.

