

# **Electric Vehicle Charging Stations**

## **Purpose**

This handout summarizes the requirements for both residential and nonresidential Electric Vehicle Charging Stations (EVCS).

## **Permits Required**

## Residential/Duplex

· A Building Permit is required

## MultiFamily/Commercial/Industrial

- A Site Plan Design Review is required
- A Building Permit is required

## **Plan Submittal Requirements**

#### Residential/Duplex

- An electrical plan is required (8.5"x 11"), include the following: See sample Plan (A) below
- Specify panel rating and location of the existing electrical service (example: 200 amp service panel)
- Indicate EV charging system load and circuit size‡
  - Provide disconnect within sight if EVCS is rated more than 60 Amps
- Specify level of EV charging (Level 1\* or Level 2\*\*)
- Provide Load calculations when the service panel rating is less than 200 Amps
- Provide manufacturers cut sheets/ installation instructions
- Indicate installation height is min 18" indoors and min 24" outdoors above floor/grade level

 Indicate if a second electric meter for EV charging will be installed

## MultiFamily/Commercial/Industrial

#### Site Plan Design Review

- Provide existing and proposed site plan including:
  - Location of proposed EVCS
  - Show parking and landscaping
- Provide manufacturers cut sheets
- Provide elevation plan or photo with dimensions

#### **Building Permit**

- · Provide building and electrical plans
- Building footprints and landscaped areas
- Locations of existing and proposed EVCS, panelboard, and service equipment
- Provide accessibility features associated with proposed EVCS/2022 CBC 11B-812
- Provide single line diagram showing existing and added electrical loads with calculations‡
- Indicate levels of EV charging; three levels are allowed in commercial/industrial/ multi-family properties (\*, \*\*, †)

#### **Review Time**

phone:

CA Relay: Dial 711

fax:

Included review time for the entitlement portion and the permit portion

(925) 960-4419

(925) 960-4410 www.livermoreca.gov



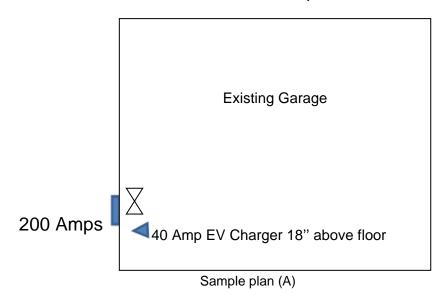
## **Additional Resources**

\*Level 1 - 120 VAC - This is regular household voltage. It can fully charge a depleted battery in six to 10 hours, depending on the vehicle model. \*\*Level 2 - 240 VAC - This voltage is the type that supports clothes dryers. It can fully charge a depleted battery in three to eight hours, depending on the vehicle model.

†Level 3 - 480 VAC or 208V three-phase - This is high voltage DC charging equipment that requires three-phase electric service. It can charge a depleted battery to roughly 80 percent of capacity in 30 minutes, depending on the vehicle model.

‡Calculated load of chargers are considered continuous loads. Overcurrent protection device shall have a rating of not less than 125% of the maximum load.

# Residential Plan Sample



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