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COMMERCIAL ELECTRIC VEHICLE CHARGING STATIONS

The City of Union City defines commercial electric vehicle (EV) charging stations as systems installed in the following locations:

- **Multi-Family Buildings** (condos, apartments or common areas of townhomes or similar complexes)
- **Commercial Locations** (such as shopping centers, restaurants, grocery stores and general retail environments)
- **Office Buildings** (employee or visitor parking areas)
- **Industrial Uses** (charging devices for vehicle fleets or equipment such as forklifts)

For general information about these systems, the State of California has put together a guidebook that you can find here: https://www.opr.ca.gov/docs/ZEV_Guidebook.pdf

REVIEW TIMELINE

All commercial EV charging systems will require drawings and a plan review to confirm compliance with electrical, structural and disabled access codes. All EV charging station applications are completed on an expedited timeline.

PLAN SUBMITTAL CHECKLIST

Commercial EV charging station drawings are not specific to electrical work. They will also need to describe disabled access, parking changes and potentially landscape changes. In addition to an electrical designer, we recommend that these drawings are prepared by an architect or engineer that is experienced with disabled access. Please provide three (3) sets of plans. **Each plan set shall include the following items:**

SITE PLAN

- List relevant property information, such as existing parking counts and ratios. Show new and existing parking spaces.
- Clearly show where the charging unit is located within the parking garage or parking lot.
- If the electric vehicle charging equipment is in an area subject to vehicular damage, an adequate barrier must be installed such as bollards or curbs. Show these protections on the plans and details

DISABLED ACCESS DETAILS

- The space width must be modified to provide for a path of travel to the charger. Identify the path of travel on the plans.
- Indicate the size of the accessible EV charging parking space, its access aisle and other accessible requirements. These items shall comply with the current California Building Code (CBC), Chapter 11B. Show all layout details and key dimensions.
- The charger shall comply with other accessibility requirements such as reach ranges. Provide details on the plans that demonstrate compliance with the CBC for the operable parts of the system.

ELECTRICAL PLANS

- Provide a complete electrical single line drawing showing the main service, sub panels and disconnecting means. Include the size of overcurrent protection devices (in amperes) for main service, sub panels, disconnects and EV charger circuit supply. Show sizes and types of conduit and conductors. Include existing and proposed loads to estimate if existing electrical service will handle the new load from the EV charging systems.
- Note electrical feeder requirements when trenching structure to structure (CEC 225). The feeder from structure to structure should be noted in the scope of work. Verify that trenching complies with minimum cover requirements for wiring methods or circuits per CEC 300.
- A lockable disconnect is required in a readily accessible location per CEC 625 for EV charging stations > 60A or 150V to ground. A plaque stating, "Emergency Power Off – Electric Vehicle Charging Station" must be installed on each disconnect.
- Provide the manufacturer's cut sheets for the system.

STRUCTURAL DETAILS

- Provide structural details to show method of attachment. Equipment weighing over 400 pounds shall include calculations prepared by an engineer to demonstrate resistance to overturning based on our seismic zone.