INTERNATIONAL BUILDING CODE (IBC)

SECTION XXX

ELECTRIC VEHICLE CHARGING

Section 420.1 Electric vehicle charging. For every newly permitted multi-family dwelling and commercial structure with more than 10 parking spaces, 10 percent of the total number of parking spaces shall be capable of supporting future electric vehicle charging stations (EVCS) and shall be identified on the construction documents. Construction documents shall indicate the location of the proposed EVCS. At least one EVCS shall be located in common use areas and available for use by all residents.

420.2 Single EVCS required. When only one EVCS space is required, a 208/240-volt individual branch circuit or a listed raceway to accommodate a future individual branch circuit shall be installed. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the proposed location of the electric vehicle charger. Construction documents shall identify the raceway termination point. The service panel or subpanel circuit directory shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent device. Electric vehicle supply equipment shall be installed in accordance with NFPA 70.

420.3 Multiple EVCS required. Construction documents shall indicate the raceway termination point and proposed location of future EVCS and electric vehicle chargers. Constructions documents shall also provide information on amperage of future electric vehicle supply equipment (EVSE), raceway methods(s) wiring schematics and electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all electric vehicles at all required EVCS at the full rated amperage of the EVSE. Plan design shall be based upon 40-ampere minimum branch circuit. Raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at time of the original construction. Electric vehicle supply equipment shall be installed in accordance with NFPA 70.

420.7.3 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future electric vehicle charging as “EV CAPABLE”. The raceway termination location shall be permanently and visibly marked as “EV CAPABLE”.

REASON:

[CITY, COUNTY, OR STATE] has seen sales of both electric vehicles (EV) and plug-in hybrid electric vehicles ("PHEV") increase by XX% from 20XX to 20XX.

The interest in EVs has grown alongside greater EV model availability, increased vehicle range, and expanded EV charging infrastructure in the region. There is continued interest from constituents to have EV charging infrastructure available at locations they frequent, including one and two family dwellings, multi-family residences, and commercial properties.

The installation of the electric vehicle supply equipment (EVSE) is made cost effective when the infrastructure is installed during the initial construction phase as opposed to retrofitting existing buildings to accommodate the new electrical equipment.

The [CITY, COUNTY, OR STATE] should continue its support of this nascent industry for plug-in electric vehicles and its efforts in constructing EV charging infrastructure as this further supports their sustainability and economic goals.