SECTION 26 27 29 ELECTRIC VEHICLE CHARGER Design Standard

PART 1 GENERAL

1.1 PURPOSE

This design standard has the purpose of creating a consistent application of overcurrent protective devices throughout the San Mateo County Community College District therefore achieving a standard of maintenance, reliability and quality throughout all renovation and new building projects.

PART 2 PRODUCTS

- 2.1 Provide infrastructure and provisions for car chargers. Bids shall include Level 2 charging stations for 3% of the total parking spaces, unless otherwise noted in the owner's project requirements (OPR). Provisions shall include connections to new or existing panels with spare capacity. Level 2 chargers require 1-40A 208VAC. The required service panel breaker for each Level 2 charging station shall be a 40A double pole (non-GFCI type) on a dedicated circuit (x 2 for dual-port EV charging stations) at 208V.
- 2.2 Provide dedicated branch circuit panel board to supply chargers.
- 2.3 Chargers shall be dual-port EV charging stations located at the junction between four parking spaces wherever possible. Locations to be determined by SMCCCD in collaboration with the designer of record.
- 2.4 Communication shall be wireless wherever practical. Units too far from a wireless access point may use a cell phone network or be hard wired with a Category 6 cable connection installed in a separate conduit from the power connection.
- 2.5 Chargers shall be accessed via security card for billing purposes. Coordinate with SMCCCD for most current user requirements.
- 2.6 Electrical Vehicle Charging Station (EVCS) shall be ADA compliant. See State of California's Division of the State Architect "Interim Disabled Access Guidelines for Electric Vehicle Charging Station" (Policy # 97-03) for Reference.
- 2.7 Stations may include automatic cable retraction.
- 2.8 Stations shall have cables with a minimum length of 18 feet.
- 2.9 EVCS shall have capacity to collect fees from drivers electronically.
- 2.10 EVCS shall have capacity to interface with existing SMCCCD bank account for payment deposits.
- 2.11 Provide systems and services to manage stations remotely through a web interface on a standard web browser.
- 2.12 Provide a minimum 1 year warranty for parts and labor.
- 2.13 APPROVED MANUFACTURERS
 - A. Schneider Electric EV Link bollards with SAE J1772 cord compatible stations.

PART 3 EXECUTION

- 3.1 SUBSTITUTIONS
 - A. Substitutions may be permitted if performance and quality equivalency can be proven by providing evidence. Substitutions will also need to match aesthetic look of existing bollards on campus. Substitutions are to be proposed to the District for review and approval.

3.2 ASSOCIATED DESIGN STANDARDS AND CONSTRUCTION SPECIFICATIONS

A. Division 26 Design Standards and Construction Specifications

END OF SECTION