DEPARTMENT OF THE NAVY



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From: Chief Engineer, Naval Facilities Engineering Systems Command

Subj: INTERIM TECHNICAL GUIDANCE FOR FISCAL YEAR 2024-03 – ELECTRIC

CHARGING INFRASTRUCTURE REOUIREMENTS FOR FEDERAL

GOVERNMENT VEHICLES

Ref: (a) Department of the Navy Policy for Inclusion of Electric Vehicle Charging Infrastructure in Project Documentation, 5 NOV 2023

(b) UFC 1-200-01 DoD Building Code, with Change 3, 26 FEB 2024

(c) UFC 2-000-05N Facility Planning Criteria for Navy and Marine Corps Shore Facilities

Encl: (1) Electric Vehicle Charging Facility (EVCF) Parking Requirements

- 1. <u>Purpose</u>. This Interim Technical Guidance (ITG) provides criteria requirements for Federal Government motor vehicle electric charging stations until Unified Facilities Criteria (UFC) requirements are developed and published.
- 2. <u>Background</u>. Reference (a) requires construction of electric vehicle charging infrastructure, such as charging stations and parking spaces, for Federal Government electric vehicles. The DD Form 1391 must include electric vehicle charging infrastructure to support no less than 15 percent of all Federal Government motor vehicles planned to be parked at the facility. Reference (b) incorporates this requirement. Reference (c) provides two new category codes for electric vehicle (EV) charging stations, 81240 for level II charging and 81241 for level III fast charging.

3. Discussion.

- a. Detailed vehicle charging requirements are being incorporated into a new UFC 3-550-06, Electric Vehicle Charging Facilities, currently under development.
- b. Current industry codes and standards do not address the fire separation distance of electric vehicle chargers from facilities, and their use within parking structures. DoD criteria will be updated as current standards evolve.
- 4. <u>Applicability</u>. This ITG is applicable to DoD Military Construction (MILCON) and Facilities Sustainment, Restoration and Modernization (FSRM) projects that are not yet at the design development stage at issuance of reference (a), and to FY25 and beyond MILCON projects and FY24 and beyond FSRM projects that include (or plan to include) parking for Federal Government vehicles.
- 5. Action. For applicable projects, incorporate the following:
 - a. Provide charging provisions for at least one electric vehicle where less than seven, but

Subj: INTERIM TECHNICAL GUIDANCE FOR FISCAL YEAR 2024-03 – ELECTRIC CHARGING INFRASTRUCTURE REQUIREMENTS FOR FEDERAL GOVERNMENT VEHICLES

at least one, Federal Government vehicle(s) is planned to be parked at the facility.

- b. Include the cost for construction of the electric vehicle charging capability in the overall cost of the project.
 - c. Adhere to enclosure (1) for EVCF parking requirements.
- d. Locate electric vehicle charging facilities a minimum of 10 m (33 feet) from buildings and parking garages. Do not affix to buildings nor install inside parking garages.
- 6. <u>Points of Contact</u>: If you have questions or concerns with respect to this ITG, please contact NAVFACSYSCOM technical representatives listed below:
- a. Ms. Solveigh Keene, P.E., NAVFAC Electrical Technical Warrant Holder at telephone (757) 322-4336 or email at solveigh.e.keene.civ@us.navy.mil
- b. Mr. David A. Gary, P.E., NAVFAC Cybersecurity Criteria Manager at telephone (757) 322-8183 or email at david.a.gary2.civ@us.navy.mil.

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Subj: INTERIM TECHNICAL GUIDANCE FOR FISCAL YEAR 2024-03 – ELECTRIC CHARGING INFRASTRUCTURE REQUIREMENTS FOR FEDERAL GOVERNMENT VEHICLES

Electric Vehicle Charging Facility (EVCF) Parking Requirements

- 1. Provide EV charging spaces in accordance with UFC 1-200-01, DoD Building Code
- 2. Provide accessible EV charging spaces in accordance with UFC 1-200-01.
- 3. Locate EV parking outside of the unobstructed space in accordance with UFC 4-010-01, DoD Minimum Antiterrorism Standards For Buildings
- 4. Position EV charging stations with one or two charging ports in line with parking stripe so as to minimize the chance of vehicle impacts. See Figure 1-1.



Figure 1-1 Electric Vehicle Parking Stalls

- 5. There must be one EV charging port for each designated EV parking stall.
- 6. Use curbs, wheel stops, or bollards to protect the EV charging stations from vehicle impact.
 - a. Curbs: Where curbs are used, provide a minimum of 3 feet (914 mm) of space between the back of the curb and the EV charger.
 - b. Curb Stops: When curb stops are used, provide a minimum of 3 feet (914 mm) of space between the back of the curb stop and the EV charger.
 - c. Bollards: When practicable, use curb stops instead of bollards. When bollards are used:

Subj: INTERIM TECHNICAL GUIDANCE FOR FISCAL YEAR 2024-03 – ELECTRIC CHARGING INFRASTRUCTURE REQUIREMENTS FOR FEDERAL GOVERNMENT VEHICLES

- i. Use schedule 40 steel pipe filled with concrete and coated with reflective hazard yellow paint or use safety yellow protective all-weather bollard covers.
- ii. Use a minimum height of 3.5 feet (1067 mm) for bollards. All bollards must be consistent in height and evenly placed, to the extent practicable.
- iii. Do not place bollards in locations that will limit movement of vehicles entering or exiting parking stalls, reduce the usable length or width of the parking stall, or obstruct vehicle doors from opening. Maintain a minimum clear space of 30 inches (762 mm) from bollards to the parking stall stripe, or the parking aisle. Maintain a minimum clear space of 1 foot (305 mm) from the end of the parking stall to the bollards.
- 7. Use parking signage or pavement markings to clearly mark each EV charging space.
 - a. Provide red parking prohibition or green permissive parking 12 by 18 inch (305 by 457 mm) sign for each parking space supplied by the EV charging station. Signs must indicate "No Parking Except Electric Vehicles," "Vehicle Charging Only," or "Electric Vehicles Only."
 - b. Provide pavement markings that outline the EV parking stall with green parking stripes, cover the entire EV parking stall in green paint with white parking stripes, or use white parking stripes with a green and white EV charging symbol that is not less than 36 by 36 inch (914 by 914 mm) square or 36 inches (914 mm) circular in diameter.
- 8. Do not place EV charging stations or bollards in locations where they will impede troop movement, truck turning movements, vehicle ingress or egress, primary pedestrian ingress or egress, pedestrian egress required by fire protection requirements, or the minimum sidewalk width required by UFC 3-201-01, Civil Engineering.
- 9. When EV charging equipment is placed inside of an existing parking stall, there must be a minimum clear space of 30 inches (762 mm) from the EV charging equipment or bollards to the parking stall stripe and the parking aisle.