

MUNICIPALITY OF [\_\_\_\_\_\_\_\_\_\_\_\_], NEW JERSEY

ORDINANCE NO. [\_\_\_\_\_\_]

AMENDING – MUNICIPAL LAND USE PROCEDURES ORDINANCE, OF THE CODE OF THE MUNICIPALITY OF [\_\_\_\_\_\_\_\_]\_\_(THE “CODE’) TO INCLUDE ELECTRIC VEHICLE CHARGING STATIONS

IT IS HEREBY ORDAINED by the MUNICIPALITY Of [ \_\_\_\_\_\_\_\_\_], State of New Jersey as follows:

**SECTION 1: Parking, Driveways, and Loading Spaces of the Code,** is hereby amended by adding the following:

**§ 1.13**. **Electric Vehicle Charging Stations**

1. **Purpose**. The purpose of this section is to provide a regulatory framework for the construction and operation of electric vehicle charging stations in the Muncipality. Electric vehicles provide many benefits for the public health, safety, and welfare, including reducing air pollution, greenhouse gas emissions and stormwater runoff contaminants; promoting savings in motor vehicle operating costs for vehicle owners; and contributing overall to sustainability goals and objectives of the Municipality of [\_\_\_\_\_\_\_\_\_] and the State.

This section also addresses the muncipality’s increasing need to accommodate residents’ increased usage of electric vehicles. New Jersey is becoming a primary market for electric vehicles, and the accompanying demand for charging stations is projected to grow with the increase of electric vehicle models on the market. At the state level, in January 2020, New Jersey passed legislation setting a target of 330,000 electric vehicles being registered in-state by 2025, increasing to 2 million electric vehicles by 2035. The New Jersey Board of Public Utilities promotes compliance with this target through an incentive program it has created for electric vehicle charging at home. At the federal level, according to the U.S. Department of Energy (DOE), the domestic transportation sector consumes approximately one-third of the U.S.’s total energy and accounts for more than two-thirds of its petroleum consumption. DOE has noted that in addition to reducing greenhouse gas emissions, increased domestic reliance on energy efficient vehicles such as hybrid and plug-in electric vehicles assists in decreasing domestic reliance on imported petroleum, increases resiliency, and diversifies the U.S.’s transportation fleet.

This section promotes the provision of appropriate infrastructure in the Municipality to support the transition to electric vehicle use, while ensuring that such infrastructure does not pose detriments to the existing neighborhoods or community character.

1. **Definitions.** As used in this section, the following terms shall have the meanings indicated:

**CHARGING LEVELS**

The standardized indicators of electrical force or voltage, at which an electric vehicle’s battery is recharged. The most common charging levels in the current market are as follows:

**Level 1:** Slow charging; operates on an alternating current (AC) circuit with voltage up to 120 volts.

**Level 2:** Medium charging; operates on an alternating current (AC) circuit with voltage commonly at 208, 220, or 240 volts.

**DC Fast Charger (DCFC):** Fast or rapid charging; operates on a direct current (DC) circuit with voltage of 480 volts or higher. DCFC charging is primarily utilized for commercial and public applications and is typically characterized by industrial grade electrical outlets that allow for faster recharging or electric vehicles.

**CHARGING OF ELECTRIC VEHICLES**

Any electric vehicle that is parked at an electric vehicle charging station and connected to the electric vehicle supply equipment.

**ELECTRIC VEHICLE**

Any vehicle that is licensed and registered for operation on public and private highways, roads, and streets; and operates, either partially or exclusively, on electrical energy from the grid or other off-board source that is stored on-board via a battery or similar energy storage device for propulsion.

**ELECTRIC VEHICLE SUPPLY EQUIPMENT**

Any equipment, including the cables, cords, conductors, connectors, couplers, enclosures, attachment plugs, power outlets, power electronics, transformer, switchgear, switches and controls, network interfaces, and point of sale equipment and associated apparatus designed and used for the purpose of transferring energy from the electric supply system to a plug-in electric vehicle.

**ELECTRIC VEHICLE CHARGING STATION**

A parking space installed with electric vehicle supply equipment that allows for the transfer of electric energy (by conductive or inductive means) to a battery or other energy storage device in an electric vehicle.

**MAKE-READY PARKING SPACES**

Parking spaces or sets of parking spaces with pre-wiring of electrical infrastructure to facilitate easy and cost-efficient future installation of electric vehicle supply equipment.

1. **Siting and design standards**
2. **Permitted locations**. Electric vehicle charging stations shall be permitted as follows:
	1. Level 1 and Level 2 charging stations shall be permitted in all zoning districts when accessory to a permitted use.
	2. DCFC charging stations shall be permitted in any zoning districts when accessory to a permitted use other than single family detached dwellings.
	3. Notwithstanding the above regulations, public electric vehicle charging stations are allowed to be constructed in any public parking lot maintained and operated by the Municipality or other public entity.
3. **Design and installation standards.** Where provided, electric vehicle charging stations shall comply with the following standards.
	1. The parking stall of an electric vehicle charging station shall be not less than 9 feet wide by 18 feet in length, the same dimensions as a conventional parking space.
	2. Charging station outlets and connector devices shall be no less than 36 inches and no higher than 48 inches from the ground or pavement surface where mounted, and shall contain a retraction device and/or a place to hang permanent cords and connectors at a sufficient and safe distance above the ground or pavement surface. Any cords connecting the charger to a vehicle shall be configured so that they do not cross a driveway, sidewalk, or passenger unloading area.
	3. Equipment mounted on pedestals, lighting posts, or other devices for on- street charging stations shallbe designed and located as to not impede pedestrian travel or create trip hazards on sidewalks.
	4. Adequate charging station equipment protection such as wheel stops and concrete-filled steel bollards shallbe used. Non-mountable curbing may be used in lieu of bollards, if the charging station is set back a minimum of 24 inches from the face of the curb.

e) Adequate site lighting shallbe provided in accordance with municipal lighting code [\_\_\_\_\_].

1. **Signage.** It is required to have signage for electric vehicle charging stations, except when accessory to a single-family detached dwelling, are subject to the following guidelines and standards:
	1. **Regulatory signs**. An electric vehicle charging station is allowed to have regulatory signage to designate the parking space as reserved for electric vehicle charging purposes, and to provide notice regarding usage restrictions and safety and operational information of the charging station. Where provided**,** regulatory signs shall be subject to the following provisions:
		1. Each electric vehicle charging station shall be allowed one (1) freestanding regulatory sign.
		2. Regulatory signs for on-street charging stations shall be consistent with the *Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD)* as published by the Federal Highway Administration, or any MUTCD Interim Approvals and Policy Recommendations where applicable.
		3. Regulatory signs for off-street charging stations shall be subject to the following standards:
			1. Each single regulatory sign shall be permitted to have a maximum of 2 plaques stacked adjacent to each other.
			2. Each plaque shall not exceed 2 square feet in area.
			3. The total height of the regulatory sign, including all of its sign plaques, shall not exceed 6 feet from grade.
			4. Regulatory signs shall not be illuminated.
		4. A regulatory sign for an off-street charging stations shall, at a minimum, contain graphics and/or text to clearly identify the parking space as an electric vehicle charging station and indicate that it is reserved for use by electric vehicles for charging purposes only. The following additional information may also be included:
			1. Hours of operation of that particular charging station and charging time limits, and if time limits or tow-away provisions are to be enforced in accordance with §1.13 F, herein;
			2. The name and logo of the electric vehicle charging equipment operator.
			3. Voltage and amperage levels;
			4. A mandate to vacate the stall when charging is complete;
			5. Usage fees, if any;
			6. Safety information; and
			7. Contact information for reporting when the equipment is not operating or other problems.
	2. If no regulatory sign as set forth in subsection (b) above is provided, it is required that the charging station shall be designated and identified clearly via pavement and/or curb markings.
		1. Markings for on-street charging stations shall be consistent with the *Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD)* as published by the Federal Highway Administration, or any MUTCD Interim Approvals and Policy Recommendations where applicable;
		2. Markings for off-street charging stations shall be subject to the review and approval of the Municipality Engineer.
		3. If a regulatory sign, subject to the provisions in subsection (b) above, is provided for a charging station, markings may also be optionally provided in conjunction with such sign.
	3. **Signs displayed on electric vehicle supply equipment**. It is strongly recommended that signage shall be allowed to be displayed on charging posts and kiosks, subject to the following provisions:
		1. On each charging post or kiosk, such signage shall not exceed 10% of the total surface area of the face of the charging post or kiosk on which it is displayed.
		2. Such signage shall not be illuminated.
		3. Such signage may include the name and logo of the electric vehicle charging equipment operator. No advertising message shall be allowed.
	4. All signs shall be maintained in accordance with Maintenance and shall conform with Prohibited Placement of Signs.
2. **Minimum charging station standards.**
3. **General provisions.**
	1. When electric vehicle charging stations are provided in accordance with this section, they shall count as two parking spaces towards the calculation for the minimum number of off-street parking spaces required as established in § 1.13.D Required Number of Parking Spaces for Specific Uses.
	2. If a mixed-use development contains multiple uses that require electric vehicle charging stations in accordance with this section, the minimum number of charging stations required for that development shall equal the sum of the number of charging stations required for each use.
	3. A fraction shall be rounded up to the nearest whole number for purposes of calculating the required number of parking spaces or the required number of charging stations when referenced in the tables in the following subsections.
	4. All electric vehicle charging stations required and provided pursuant to this section shall be installed with charging equipment that allows either Level 2 or DCFC charging levels.
4. **Non-residential uses.** It is required thatnon-residential developments shall be subject to the following provisions:
	1. In association with non-residential uses, all new parking facilities and all expansions of existing parking facilities resulting in an increase of more than 5 spaces or 10% in parking capacity shall include electric vehicle charging stations in accordance with the table below.

|  |  |
| --- | --- |
| **Number of Parking** **Spaces Required** | **Minimum Number of Electric Vehicle Charging Stations Required** |
| 15 or less | 0 |
| 16 to 100 | 2% of total required number of parking spaces |
| > 100 | 3% of total required number of parking spaces |

* 1. In accordance with the above table, if the minimum number of electric vehicle charging stations required is zero, then the parking facility shall be equipped with conduits that are equipped with pull wires or otherwise facilitate wiring capable of supporting future hardwire installation of electric vehicle charging stations.
1. **Multi-family residential uses**. It is required thatmultifamily residential developments with 5 or more units shall be subject to the following provisions:
	1. In association with multi-family developments as defined above, all new parking facilities and all expansions of existing parking facilities resulting in an increase in parking capacity by more than 5 spaces or 10% shall include electric vehicle charging stations in accordance with the table below.

|  |  |
| --- | --- |
| **Number of Parking Spaces Required** | **Minimum Number of Electric Vehicle Charging Stations Required** |
| 50 or less | 5% of total required number of parking spaces |
|  > 50 | 10% of total required number of parking spaces |

* 1. All new parking stalls provided in association with new multifamily construction that are not electric vehicle charging stations shall be equipped with conduits that are equipped with pull wires or otherwise that facilitate wiring capable of supporting future hardwire installation of electric vehicle charging stations.
1. **ADA spaces**. It is encouraged, but not required, that ADA-accessible electric vehicle charging station be provided within any parking facility that is required to have electric vehicle charging stations, in accordance with the following table:

|  |  |
| --- | --- |
| **Number of EV Charging Stations Required**  | **Minimum Accessible EV Charging Stations Recommended** |
| 3 – 50 | 1 |
| 51 - 100 | 2 |
| 100 or greater | 2, plus 1 additional accessible charging station for each increment of 50 charging stations provided |

**E. Permitting and Approval.**

1. **Permit Required.** Any development involving the installation of a new outlet, conduit and wiring, or other electric vehicle supply equipment must obtain an electrical permit and pass the subsequent inspection.
2. **Site plan review exemptions.** Projects solely involving the following shall be exempt from site plan review:
	1. Installation of electrical vehicle supply equipment at existing parking facilities to convert existing parking stalls into charging stations, provided that the total number of parking stalls, including conventional stalls and electric vehicle charging stations, remains the same as what is existing within the parking facility.
	2. Installation of electric vehicle supply equipment and charging stations that are accessory to a single-family detached dwelling.

**F. Restrictions and Enforcement.** Except when accessory to a detached single-family dwelling**, it is required that** the following shall occur:

* 1. All electric vehicle charging stations shall be reserved for charging of electric vehicles only.
	2. It shall be unlawful for any person to park or leave standing a vehicle in a stall or space designated for the charging of electric vehicles unless the vehicle is connected for electric charging purposes.
	3. Time limits may be placed on the number of hours that an electric vehicle is allowed to charge, prohibiting indefinite charging/parking. If applicable, warnings should be posted to alert charging station users about hours of use and possible actions affecting electric vehicle charging stations that are not being used in accordance with posted rules.
	4. If an electric vehicle exceeds the time limits/hours of permitted charging for a particular charging station, as indicated by the applicable signage for such charging station, then:
		1. For publicly-owned electric vehicle charging stations, the electric vehicle shall be subject to towing at the vehicle owner’s expense or a fine of $50 for the first three violations and a fine of $100 for each violation thereafter. Towed vehicles may be reclaimed at a designated towing facility by contacting the [\_\_\_\_\_\_] Department.
		2. For privately-owned electric vehicle charging stations, if an electric vehicle exceeds the hours of permitted charging for a particular charging station, as indicated by the applicable signage for such charging station, then property owner or such owner’s designee shall possess discretion regarding towing and fines.
	5. Not withstanding **§1.13**.**D.(c)** herein, to discourage indefinite charging/parking, a publicly-owned or a private-owned electric vehicle charging station with applicable signage may bill for the amount of time a vehicle is actually connected to a charging unit, rather than for active charging time, as a means of shifting the billing currency to one based on time rather than on energy consumed. In addition, the municipality or the private owner or owner’s designee shall have discretion to remove all vehicles exceeding the permitted charging time, in accordance with the procedures listed in **§1.13**.**D.(d)(i)** and **§1.13**.**D.(d)(ii)**.

**G. Training.** Due to the unique chemical, electrical, and thermal hazards associated with high voltage charging systems, to address the potential consequences such hazards pose, all municipal staff in the law enforcement, fire, and/or emergency response departments shall receive education and training related to electric vehicles and electric vehicle charging stations as follows:

* 1. **Law Enforcement and Fire Departments.** The law enforcement and fire departments shall undergo training such as, but not limited to:

		1. Participating in the National Fire Protection Association’s (NFPA’s) self-paced online training program, *Alternative Fuel Vehicles Training Program for Emergency Responders*.
		2. Developing effective methods to properly combat and extinguish lithium ion battery fires.
	2. **Volunteer Rescue Squad.** The Volunteer Rescue Squad shall receive general education and training regarding the hazards described in this **§ 1.13**.**G.**, for purposes of being better able to anticipate and render the basic life support care needed, after the fire department has secured the incident area and deemed it safe.

SECTION 2: This ordinance shall take precedence over all other ordinances or parts of other ordinances inconsistent with this ordinance, to the extent of any inconsistencies between them.

SECTION 3: If any section, subsection, paragraph, clause or provision of this ordinance shall be adjudged to be invalid, such adjudication shall apply only to such section, subsection, paragraph, clause or provision and the remainder of this ordinance shall be deemed valid and effective.

SECTION 4: This ordinance shall take effect upon adoption and publication in such manner required by law.

INTRODUCED: [\_\_\_\_\_/\_\_\_**/2021**

ADOPTED: [\_\_\_\_\_/\_\_\_**/2021**

Note: This model ordinance was based on Morris Township, NJ Ordinance (§95.59)and Berkeley Heights, NJ Draft Ordinance. In addition, Berkeley Heights Draft Ordinance reflects input and comments from the following sources in an effort to get as many stakeholders in the municipality on-board with the ordinance in advance of its passage.

(1) Township Attorney;

(2) Township Planner;

(3) Township Engineer;

(4) Environmental Commission;

(5) Fire Department;

(6) Police Department;

(7) Volunteer Rescue Squad;

(8) Sustainable Jersey;

(9) Township Council Members (following a PowerPoint presentation about the proposed ordinance, in advance of the First Reading); and

(10) Volunteers from the Township with engineering and motor vehicle transit expertise.

**ANJEC does not provide legal advice. All ordinances should be reviewed by the municipality’s attorney prior to adoption.**