

Introduced by: Ms. Durham, Mr. Carter,
Mr. Cartier, Mr. Tackett,
Ms. Hartley-Nagle

Date of introduction: July 27, 2021

SUBSTITUTE NO. 1 TO ORDINANCE NO. 21-094

**TO AMEND *NEW CASTLE COUNTY CODE* CHAPTER 6 (“BUILDING CODE”),
ARTICLE 3 (“ADMINISTRATION”), SECTION 6.03.013 (“SUBMITTAL
DOCUMENTS”), ARTICLE 4 (“THE BUILDING CODE”), SECTION 6.04.002.
 (“AMENDMENTS TO THE INTERNATIONAL BUILDING CODE”), AND ARTICLE 5
 (“THE RESIDENTIAL CODE”), SECTION 6.05.002. (“AMENDMENTS TO THE
INTERNATIONAL RESIDENTIAL CODE”) RELATING TO CERTAIN
NEW RESIDENTIAL CONSTRUCTION, ELECTRIC VEHICLES,
AND CHARGING INFRASTRUCTURE**

WHEREAS, New Castle County recognizes the importance of the natural environment and ecological protection in creating a high quality of life, and for building and maintaining great neighborhoods; and

WHEREAS, motor vehicles with diesel- and gas-powered engines significantly contribute towards pollution and environmental degradation; and

WHEREAS, electric vehicles are less complex to build, cheaper to maintain, last longer, are more environmentally friendly in terms of both tailpipe emissions and noise pollution than diesel- and gas-powered vehicles; and

WHEREAS, many vehicle manufacturers in the United States and around the world, including General Motors, Volvo, and Jaguar, have announced their intention to end the production of diesel- and gas-powered motor vehicles and entire jurisdictions, such as California and the United Kingdom, have set dates for banning the sale of non-electric vehicles, which will likely increase the supply and lower the cost of electric vehicles; and

WHEREAS, President Biden has issued an Executive Order in furtherance of his Administration’s goal that at least 50% of all new vehicle sales shall be electric vehicles by 2030; and

WHEREAS, the U.S. Senate recently passed the Infrastructure Investment and Jobs Act that will, among other things, provide \$7.5 billion dollars to build half a million electric charging stations in public spaces, such as highway rest stops, convenience stores, restaurants, and hotels in an effort to make recharging as easy as refueling; and

WHEREAS, residents of New Castle County will increasingly demand that our housing stock be outfitted with the equipment necessary to re-charge electric vehicles; and

WHEREAS, retrofitting existing homes to install electric vehicle charging stations is both time consuming and expensive, unless the home was initially designed and constructed to facilitate the easy installation of such charging stations; and

WHEREAS, providing the basic infrastructure at the time of construction is a nominal increase in the design, construction, and cost of new construction; and

WHEREAS, several jurisdictions, such as Howard and Montgomery Counties in Maryland, the City of Atlanta, and the entire State of California currently require that all new construction either provide for the installation of electric vehicle charging stations and/or that all new construction be “EV-ready”; and

WHEREAS, New Castle County has an interest in making the future installation of electric vehicle charging stations as inexpensive and simple as possible; and

WHEREAS, New Castle County Council finds that the provisions of this Ordinance are rationally and reasonably related to, substantially advance, and are narrowly tailored to achieve its goal of protecting and preserving legitimate government interests, including the protection and preservation of the public health, safety, prosperity, general welfare, and quality of life.

NOW, THEREFORE, THE COUNTY OF NEW CASTLE HEREBY ORDAINS:

Section 1. *New Castle County Code* Chapter 6 (“Building Code”), Article 3 (“Administration”), Section 6.03.013. (“Submittal documents”) is hereby amended by adding the underlined language as set forth below.

Sec. 6.03.013. - Submittal documents.

...

B. *Construction documents*. Construction documents shall be in accordance with this Section.

...

2. *Site plan*. The construction documents submitted with the application for permit shall be accompanied by three (3) sets of a site plan, or in an electronic format as required by the Code Official, showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, location of electric vehicle supply equipment (EVSE) installed and EV-ready spaces, the established street grades...

Section 2. *New Castle County Code* Chapter 6 (“Building Code”), Article 4 (“Building Code”), Section 6.04.002. (“Amendments to the International Building Code”) is hereby amended by adding the underlined language as set forth below.

The International Building Code, 2018 Edition, is amended by the addition of the new chapter below. Note: Although the International Building Code does not identify sections with a “B” designation, such a designation is utilized to avoid any confusion as to which Code the amendment relates.

CHAPTER 36, ELECTRIC VEHICLE CHARGING INFRASTRUCTURE, the International Building Code, 2018 Edition, is amended by the addition of a new Chapter 36 as follows:

CHAPTER 36. ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

Section B3601 – Purpose, Definitions, and Scope.

Section B3601.1 Purpose.

The purpose of this Chapter is to facilitate the use of electric vehicles in conjunction with residential Group R-2 occupancies.

Section B3601.2 Definitions.

Electric vehicle (“EV”) means an automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, that use electricity for propulsion, and which includes one of the following:

1. A plug-in hybrid vehicle, which operates with an internal combustion engine and an electric motor that can be plugged into an external electric power source to charge the internal battery; or
2. An all-electric vehicle, which operates solely from an internal electric battery.

Electric vehicle charger installed means having a functioning electric vehicle charging station in accordance with the National Electrical Manufacturer’s Association (“NEMA”) standards for Level 2 Electric Vehicle Supply Equipment (“EVSE”) that is located no more than five (5) feet from a parking space which shall be in accordance with the Unified Development Code.

Electric vehicle charger ready means having installed electrical panel capacity in conjunction with the roughed-in conduit and wiring necessary to safely supply a NEMA Level 2 EVSE, and which is conspicuously marked for future installation of an EVCS.

Electric vehicle charging station (“EVCS”) means the equipment that connects an electric vehicle to an external source of electricity and recharges the electric vehicle’s internal battery, including all the necessary ungrounded, grounded, and equipment grounding conductors and the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus supplied and installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.

EV-ready space means a designated parking space in accordance with the Unified Development Code with dedicated electric vehicle supply equipment that is installed in accordance with the current adopted electrical code in the State of Delaware where the EVSE is located no more than five (5) feet from the parking space.

Electric vehicle supply equipment (“EVSE”) means any equipment or electrical component used in charging an electric vehicle at a specific location. EVSE does not include equipment located on the electric vehicle itself.

Section B3601.3 Scope.

This Chapter applies to the construction of new residential Group R-2 occupancies for which a building permit has been issued on or after January 1, 2022. This Chapter does not require updates to any existing buildings or structures.

Section B3602 – Electric vehicle charging stations.

Section B3602.1 Requirements.

Electric vehicle charging stations shall be installed in accordance with NFPA 70 and the most recently adopted electrical code in the State of Delaware. Electric vehicle charging system equipment shall be listed and labeled in accordance with UL 2202. Electric vehicle supply equipment shall be listed and labeled in accordance with UL 2594.

Section B3603 - Electric Vehicle Charging Specifications.

Section B3603.1 Building and Parking Requirements.

A. The following apply to residential Group R-2 occupancies:

1. a. Five percent (5%) of the total available parking spaces designated for residents must have an EVCS installed; and
- b. Fifty percent (50%) of the total available parking spaces designated for residents must be EV-ready spaces.
2. The electric vehicle charging stations required under this Chapter must be at least a NEMA Level 2 charger and be able to self-meter to charge for the electricity used and shall be identified with permanent markings or signage.
3. Each residential Group R-2 occupancy must provide at least one (1) electric vehicle charger installed parking space per building in a common area.

Section 3. *New Castle County Code* Chapter 6 (“Building Code”), Article 5 (“Residential Code”), Section 6.05.002. (“Amendments to the International Residential Code”) is hereby amended by adding the underlined language as set forth below.

The International Residential Code, 2018 Edition, is amended by the addition of the new chapter below. Note: Although the International Residential Code does not identify sections with a “R” designation, such a designation is utilized to avoid any confusion as to which Code the amendment relates.

CHAPTER 45, ELECTRIC VEHICLE CHARGING INFRASTRUCTURE, the International Residential Code, 2018 Edition, is amended by the addition of a new Chapter 45 as follows:

CHAPTER 45. ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

Section R4501 – Purpose, Definitions, and Scope.

Section R4501.1 Purpose.

The purpose of this Chapter is to facilitate the use of electric vehicles in conjunction with one- and two-family dwellings and townhouses.

Section R4501.2 Definitions.

Electric vehicle means an automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, that use electricity for propulsion, and which includes one of the following:

1. A plug-in hybrid vehicle, which operates with an internal combustion engine and an electric motor that can be plugged into an external electric power source to charge the internal battery; or
2. An all-electric vehicle, which operates solely from an internal electric battery.

Electric vehicle charger installed means having a functioning electric vehicle charging station in accordance with the National Electrical Manufacturer's Association ("NEMA") standards for Level 2 Electric Vehicle Supply Equipment ("EVSE") that is located no more than five (5) feet from a parking space which shall be in accordance with the Unified Development Code.

Electric vehicle charger ready means having installed electrical panel capacity in conjunction with the roughed-in conduit and wiring necessary to safely supply a NEMA Level 2 EVSE, and which is conspicuously marked for future installation of an EVCS.

Electric vehicle charging station ("EVCS") means the equipment that connects an electric vehicle to an external source of electricity and recharges the electric vehicle's internal battery, including all the necessary ungrounded, grounded, and equipment grounding conductors and the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus supplied and installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.

EV-ready space means a designated parking space in accordance with the Unified Development Code with dedicated electric vehicle supply equipment that is installed in accordance with the current adopted electrical code in the State of Delaware where the EVSE is located no more than five (5) feet from the parking space.

Electric vehicle supply equipment ("EVSE") means any equipment or electrical component used in charging an electric vehicle at a specific location. EVSE does not include equipment located on the electric vehicle itself.

Section R4501.3 Scope.

This Chapter applies to the construction of new residential one- and two-family dwellings and townhouses for which a building permit has been issued on or after January 1, 2022. This Chapter does not require updates to any existing buildings or structures.

Section R4502 – Electric vehicle charging stations.

Section R4502.1 Requirements.

Electric vehicle charging stations shall be installed in accordance with NFPA 70 and the most recently adopted electrical code in the State of Delaware. Electric vehicle charging system equipment shall be listed and labeled in accordance with UL 2202. Electric vehicle supply equipment shall be listed and labeled in accordance with UL 2594.

Section R4503 - Electric Vehicle Charging Specifications.

Section R4503.1 Building and Parking Requirements.

A. The following apply to one- and two-family dwellings and townhouses:

1. At least one (1) dedicated electric vehicle charger ready parking space shall be provided.
2. If the residential dwelling or townhouse has a garage, the electric vehicle charger ready parking space must be located in the garage and the EVSE infrastructure must be conspicuously labeled for future use.
3. If the residential dwelling or townhouse does not include a garage, an EV-ready space must be provided in the driveway or at an assigned parking space, where applicable, and the EV-ready space infrastructure must be sealed and labeled for future use.
4. If neither subsection 2. nor subsection 3. apply, then the following requirements apply:
 - a. Five percent (5%) of the total available parking spaces designated for residents must have an EVCS installed; and
 - b. Fifty percent (50%) of the total available parking spaces designated for residents must be EV-ready spaces.

Section 4. This Ordinance shall become effective on January 1, 2022, following adoption by County Council and approval by the County Executive.

Adopted by County Council
of New Castle County on:

President of County Council
of New Castle County

Approved on:

County Executive
of New Castle County

SYNOPSIS: This Ordinance, if enacted, would require that new residential one- and two-family dwellings and townhouses and residential Group R2 occupancies for which a building permit has been issued on or after January 1, 2022 be built with the infrastructure necessary to relatively easily and cost effectively install electric vehicle charging stations at a future date.

FISCAL NOTE: There is no discernable fiscal impact.