

## New Jersey Department of Environmental Protection (DEP) It Pay\$ to Plug In (IPPI) EV Charging Grant Program

### Compliance and Best Practices Guidelines for EV Chargers and the Americans with Disabilities Act (ADA)

#### I. ADA-Compliance: Background

The Americans with Disabilities Act (ADA) is a federal civil rights law that prohibits discrimination in public places against individuals with disabilities. The [ADA Standards for parking](#) explain federal requirements for accessible parking, including the minimum number of required accessible spaces, and their design and location.

The [New Jersey Barrier Free Subcode](#) provides an accessibility standard for the State of New Jersey. Like the ADA Standards for Parking, the Subcode includes requirements for accessible parking spaces, their design and location. The requirements of this Subcode are limited to the State of New Jersey.

In addition, some local governments in New Jersey have adopted their own standards that exceed the requirements of the ADA or New Jersey Barrier Free Subcode. When designing and planning an EV Charging Area, it is important to consult the local governing authority where the charger will be located to determine whether local accessibility requirements exceed the federal or state requirements.

Neither the ADA nor the New Jersey Barrier Free Subcode provide standards specific to charging station-equipped parking spots. However, the standards from both documents as they pertain to parking and equipment operation may be applied to charging station-equipped parking spots. This guidelines document will provide requirements and guidance based on these prior standards in addition to several industry studies and planning guides that contain best practices for installing charging stations that service ADA-compliant parking spaces.

#### II. DEP's IPPI Grants Program: ADA-Compliance Requirements

This document describes ADA compliance and best practices for entities that receive funding from *It Pay\$ to Plug In* (IPPI), DEP's grant program for electric vehicle charging infrastructure.

In the DEP's IPPI [Program Overview and Instructions](#), the following requirement applies to Level 1, Level 2, and DC Fast charging stations that are funded by IPPI. (See Section 3.3 Charging Station Eligibility):

*Charging station installation must meet ADA-compliance guidelines and follow all applicable laws, ordinances, regulations and standards.*

All applicants must also check the corresponding box on the [Certification Checklist](#) acknowledging that they read this document (IPPI Program's Compliance and Best Practices Guidelines for EV Chargers and the Americans with Disabilities Act (ADA)), understand that

ADA compliance may vary by municipality, and that they will consult with and follow all applicable municipal ADA ordinances. The checklist must be dated and signed by the applicant.

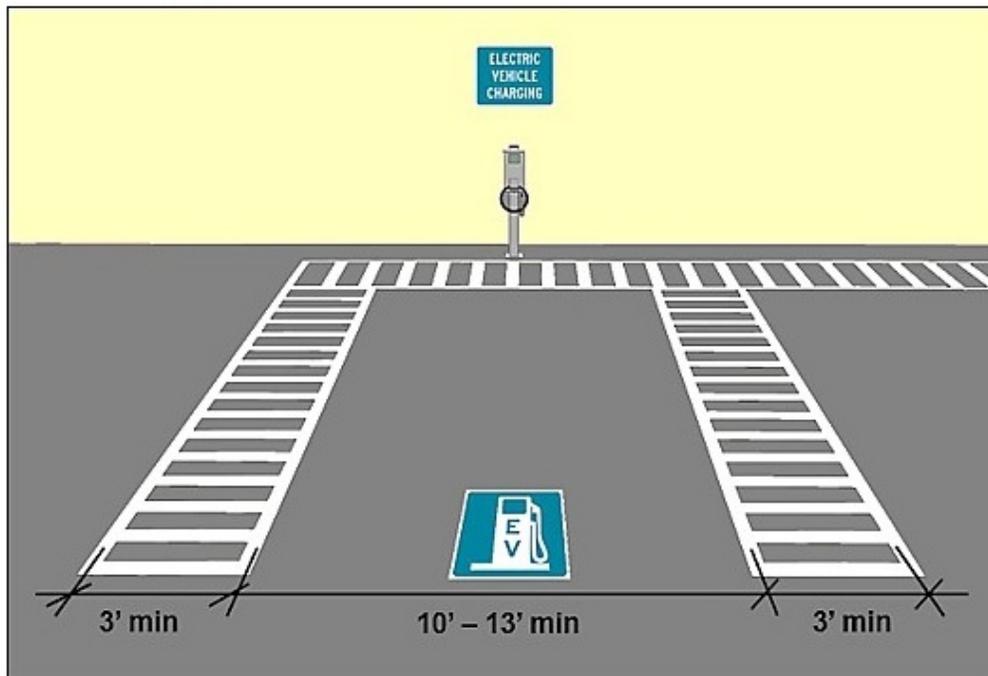
### III. Definitions

Listed below are words and phrases that are referred to throughout this document. These words and phrases are defined in relation to their use within this document and may not have universal application.

**“ADA Accessible EV Charging Area”** - for the purposes of this document, an ADA Accessible EV Charging Area refers to a charging station in an accessible parking space that is constructed with the express purpose of adhering to guidelines and best practices for installing an accessible option for EV charging. Refer to Figure 1 for an example of an ADA Accessible EV Charging Area.

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**Figure 1: ADA Accessible Charging Area**



#### **Vehicle Space**

*A vehicle space at least 10' – 13' wide is advisable. A 10' width offers an extra 2' that effectively provides a 5' aisle on one side when paired with the accessible route; a 13' wide space will allow an 8' aisle. This flexibility is helpful since the parking direction is determined by the location of the charging station and the vehicle connection. Use the International Symbol of Accessibility only where spaces are reserved exclusively for people with disabilities.*

Image Source:

<https://www.access-board.gov/ada/guides/chapter-5-parking/#electric-vehicle-charging-stations>

**“Access Aisle”** - Side access aisle of 60 inches wide (minimum) to allow space for wheelchairs and other mobility equipment to be maneuverable in and out of the parking space. *Refer to Figure 2 for an example of an Access Aisle.*

**“Barrier Free Parking Space”** - The New Jersey Barrier Free Subcode and the 2010 Americans with Disabilities Act requires that accessible car parking spaces be at least 96 inches (8 feet) wide and accessible van parking spaces be at least 132 inches wide (11 feet). *Refer to Figure 2 for an example of a Barrier Free Parking Space.*

**Figure 2: Access Aisle & Barrier Free Parking Space**

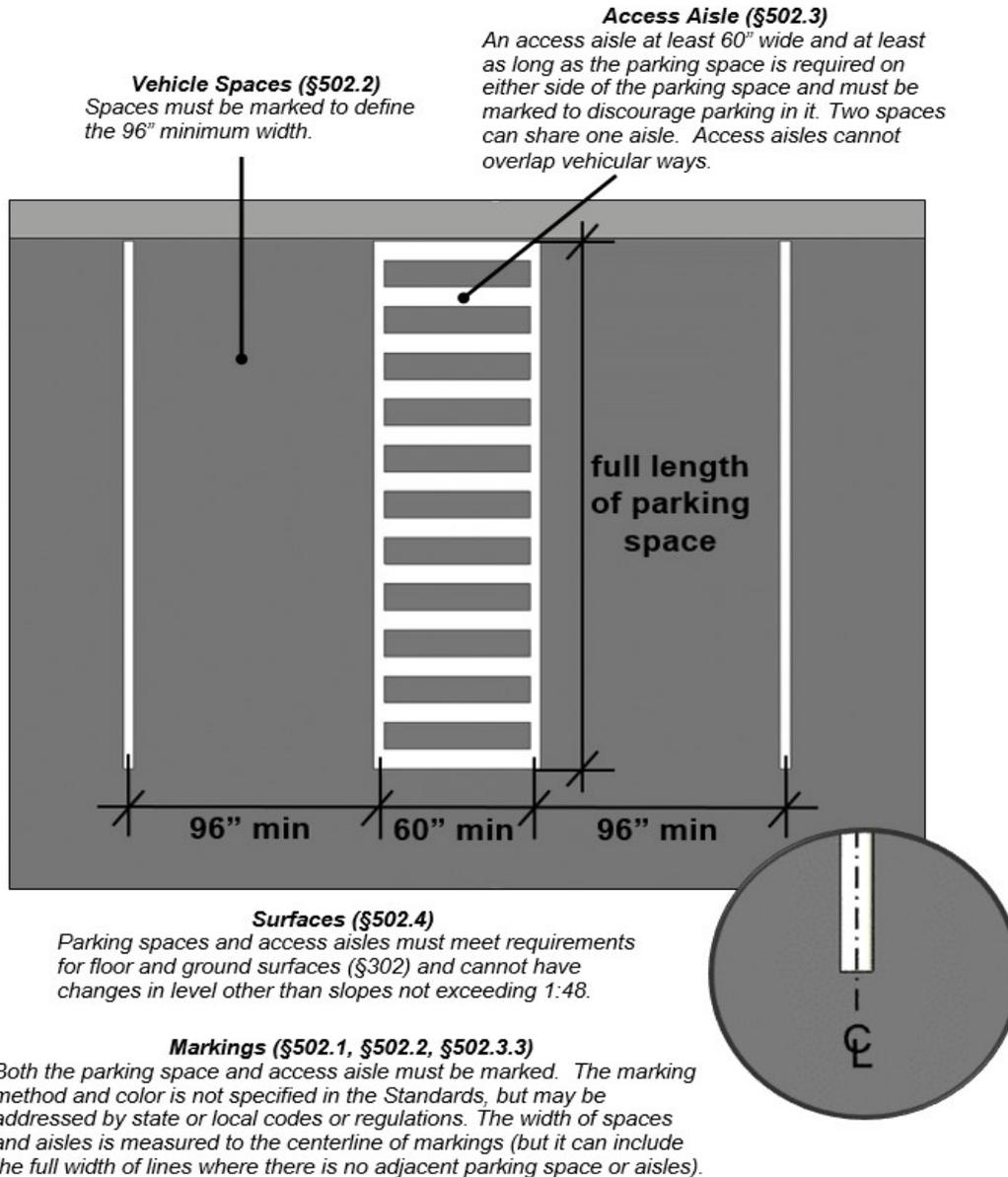


Image Source:

<https://www.access-board.gov/ada/guides/chapter-5-parking/#accessible-parking-space>

**“Reach Range”** - All operable parts of the charging stations, including payment mechanism if present, shall be within 48 inches (4 ft) maximum measured from the surface of the parking space where charging stations are installed. This means that the highest operable part of the equipment can be no higher than 42-inches from the base of the dispenser if mounted on a six-inch curb. Additionally, no object in the surrounding area can be allowed to physically inhibit an individual from accessing the charging equipment from the barrier free parking space. This includes any curbs, wheel stops, sign poles, setbacks, bumper guards, and/or bollards. Refer to Figure 3 for an example of reach range consideration and measurements.

**Figure 3: Reach Range**

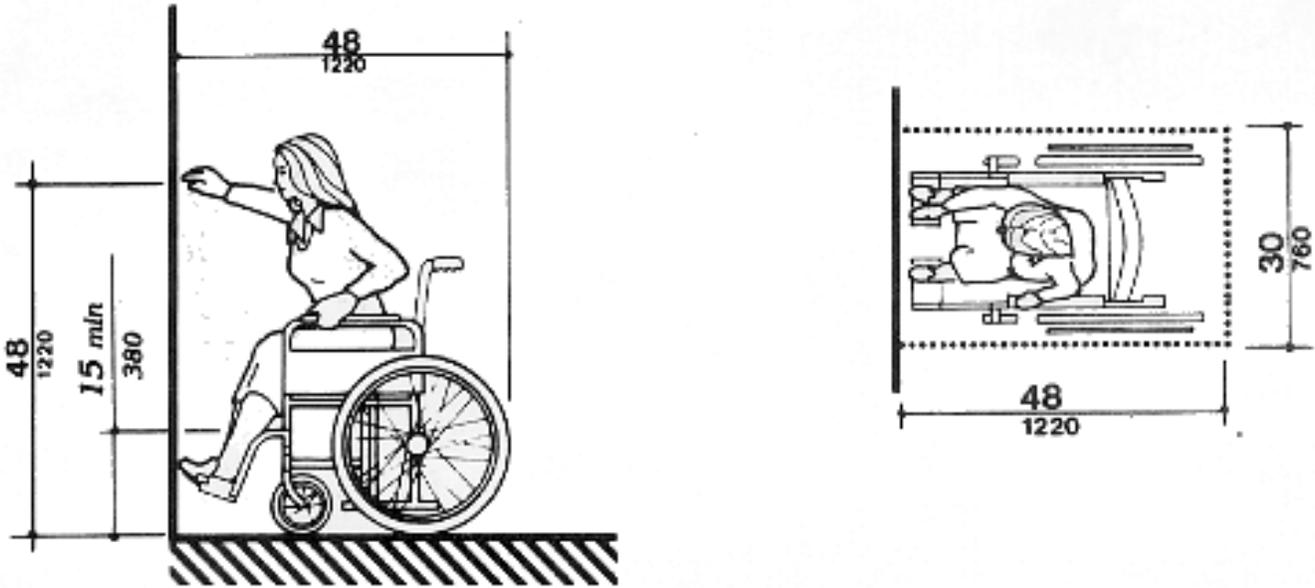


Image Source:  
[Fig. 5a High Forward Reach Limit \(ada.gov\)](http://ada.gov)

**“Non-accessible EV Charging Area”** - for the purposes of this document, a Non-Accessible EV Charging Area refers to a charging station that is not constructed with the express purpose of adhering to guidelines and best practices for installing ADA accessible charging areas. A Non-Accessible EV Charging Area cannot be marked as accessible.

## IV. DEP’s IPPI Grants Program: ADA-Compliance Guidelines and Best Practices

The DEP produced this guideline document to ensure each applicant is aware that federal, state, and local accessibility regulations exist and may be applied to the installation and servicing of an ADA-Accessible Charging Area. Should an applicant choose or otherwise be required to install and service an EV charging station in an ADA-compliant parking area, it is recommended that the applicant adhere to the following guidelines.

### IVa. Installing an ADA Accessible EV Charging Area

While there is no common national standard for ADA Accessible EV Charging Areas, many concepts are addressed within existing Federal guidelines and/or required within State or municipal codes. When installing an ADA Accessible EV Charging Area, general requirements often found within these existing guidelines and/or codes indicate that the following must be provided or adhered to:

- Required Minimum Number of Accessible Parking Spaces** - Because an EV Charging Area must be used for EV charging only, the parking space associated with the charging station is not considered to be an ADA-compliant accessible parking space by ADA Standards and cannot count towards the minimum number of required ADA-compliant accessible parking spaces under the New Jersey Barrier Free Subcode and the 2010 Americans with Disabilities Act. **Before creating an ADA Accessible EV Charging Area, ensure that the associated parking facility will continue to meet ADA requirement for minimum number of accessible parking spaces once installation is complete.**
- Signage and Markings** - The [ADA Standards for Accessible Design](#) and the [New Jersey Barrier Free Subcode](#) have specific signage and marking requirements for accessible parking spaces. It is required that each accessible parking space must display the R7-8 sign portraying the international symbol of accessibility and the New Jersey R7-8P penalty sign. DEP’s IPPI [Program Overview and Instructions](#) also require signage and floor paint designating the parking space for EV charging only. All signs must be visible and mounted near the Charging Station. Local laws may include further requirements regarding signage and the marking of parking spaces and access aisles. *Refer to Figure 4 for an example of ADA Accessible EV Charging Area Signage.*
- EV Charging Only** - Parking spaces that house EV Charging equipment, including barrier-free spaces, are only to be used by electric vehicles for charging purposes. No vehicle may park in the parking space unless that vehicle is charging.
- Barrier Free Parking Space** - A barrier free parking space for the vehicle must be provided with an adjacent side access aisle to allow space for wheelchairs and mobility equipment. The dimensions of the parking space and adjacent side aisles must meet the ADA standards.

Figure 4: Signage

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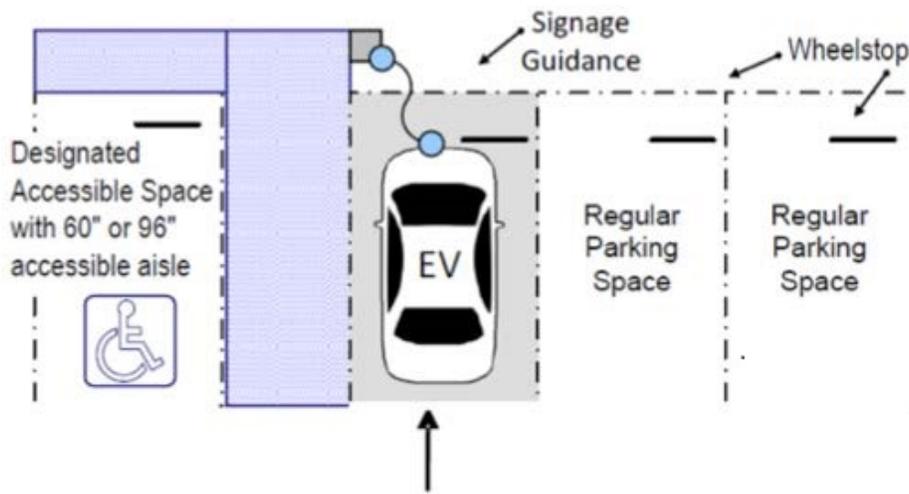
This figure illustrates the proper presentation of Accessible EV Charging Signage. These signs are: the ADA R7-8 Sign (top), the NJ R7-8P Penalty sign (middle), and the EV Charging Designation sign (bottom).

- Unobstructed Pathway - The location of the charging station and the position of bollards and wheel stops must be carefully considered to ensure there is an unobstructed path to the charging station, and that Reach Range is ensured.
- Reach Range - Reach range must always be considered to ensure all operable parts of the charging equipment are accessible to all persons, including wheelchair users.

Listed below are additional considerations for differing ADA Accessible EV Charging Area installation scenarios:

- A. Installation of charging equipment at an existing ADA accessible parking space. Be aware that once the charging station is installed, the resulting accessible EV Charging Area will no longer count toward ADA parking requirements. Only install a charging station at an ADA compliant parking space if the parking facility has additional ADA compliant parking that meet ADA requirements independently. The resulting charging station must retain aisle access as well as provide a barrier free route to the charging equipment. Considerations should be taken to ensure cords or other pieces of charging equipment do not block pedestrian paths or adjacent accessible routes when plugged into a vehicle.
- B. Installation at an existing non-accessible parking space, with the intent to make the final parking space ADA accessible. Ensure that the resulting accessible EV Charging Area will provide an appropriately sized barrier free parking space and aisle access with a route to the charging equipment. This may require the initial parking space to be expanded to accommodate accessible parking space requirements. Ensure that the initial parking space area can accommodate the area requirements of an accessible EV Charging Area prior to beginning installation.
- C. Construction of an entirely new parking space for the sole purpose of housing an ADA Accessible EV Charging Area. It is recommended that access aisles are included on both sides of the Parking Space to provide appropriate user mobility. The constructed Parking Space must be barrier free, providing the appropriate minimum amount of parking area for cars or vans. When subsequently installing an ADA Accessible EV Charging Area at the entirely new parking space, ensure that it will be accessible along the aisle pathway. *Refer to Figure 1 (pg. 2) for an example of a properly constructed parking space housing an accessible EV Charging Area.*
- D. Installation of a Dual-Port EV Charger to support both an ADA Accessible EV Charging Area and a Non-Accessible EV Charging Area. A Dual-Port EV Charger may be installed in between an ADA barrier free parking space and regular parking space to create both an ADA Accessible EV Charging Area and a Non-accessible EV Charging Area. Only Dual-Port charging equipment may be used in this scenario so that both charging areas can be used independently. Be aware that once the charging station is installed the resulting accessible EV Charging Areas will not count toward ADA parking requirements. Only install a charging station at an ADA compliant parking space if the parking facility has additional ADA compliant parking that meet ADA requirements independently. *Refer to Figure 5 for an example of properly constructed parking spaces servicing both ADA accessible and non-accessible EV Charging Areas.*

**Figure 5: Dual-Port EV Charger Servicing an ADA Accessible EV Charging Area and a Non-Accessible EV Charging Area**



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**Accessible EV Charging Station**

- Includes pedestal mounted charging station, signage, and barrier free routes to charging equipment and the building.
- The barrier free area adjacent to the Designated Accessible Space shall be striped in blue and be 60" or 96" wide.

Image Source:

[https://afdc.energy.gov/files/u/publication/WPCC\\_complyingwithADArequirements\\_1114.pdf](https://afdc.energy.gov/files/u/publication/WPCC_complyingwithADArequirements_1114.pdf)

**IVb. Installing a Non-Accessible EV Charging Area**

When installing a Non-Accessible EV Charging Area, we recommend as best practice that each station meet general reach range requirements to the greatest extent possible. We also recommend that applicants check local ordinances to see if there are any additional EV Charging Area requirements implemented through township or municipality regulations.

**V. Reporting ADA Compliance-Related Project Updates to the IPPI Grants Program**

If an application is submitted for charging equipment that would not initially be servicing an ADA Accessible EV Charging Area, but the project is then subsequently requested or otherwise required by the location's Municipality to service an ADA Accessible EV Charging Area, the applicant must notify the IPPI grants program. This is important because a grant modification may be necessary, particularly if the equipment and/or charger location must be changed as a result. Failure to provide this notification may result in the cancellation of the application or grant.

## VI. Additional Resources

Listed in this section are additional resources that provide a wealth of information on ADA compliance and best practices as it relates to parking and/or EV charging. Please note that this is not a comprehensive list. Applicants are recommended to review these documents.

*2010 ADA Standards for Accessible Design:*

(<https://www.ada.gov/regs2010/2010ADASTandards/2010ADASTandards.htm>)

*New Jersey Barrier Free Subcode:*

([https://www.state.nj.us/dca/divisions/dhcr/rec/pdf/barrierfree\\_prior.pdf](https://www.state.nj.us/dca/divisions/dhcr/rec/pdf/barrierfree_prior.pdf))

*New Jersey Division of Codes and Standards, 2018 International Building Code, New Jersey Edition, Chapter 11 – Accessibility:*

(<https://codes.iccsafe.org/content/NJBC2018PA2/chapter-11-accessibility>)

*New Jersey Guide to Accessible Parking:*

([https://www.state.nj.us/humanservices/dds/documents/BROCHURES/2020/New\\_Jersey\\_Guide\\_to\\_Accessible\\_Parking\\_Booklet\\_2019.pdf](https://www.state.nj.us/humanservices/dds/documents/BROCHURES/2020/New_Jersey_Guide_to_Accessible_Parking_Booklet_2019.pdf))

*United States Access Board – ADA Guide - Chapter 5: Parking Spaces:*

(<https://www.access-board.gov/ada/guides/chapter-5-parking/>)

*United States Department of Energy - ADA Requirements for Workplace Charging Installation:*

([https://afdc.energy.gov/files/u/publication/WPCC\\_complyingwithADArequirements\\_1114.pdf](https://afdc.energy.gov/files/u/publication/WPCC_complyingwithADArequirements_1114.pdf))