On-Street Electric Vehicle Charging Resources for the City of New Orleans

The number of electric and plug-in hybrid vehicles (EVs and PHEVs, respectively) is growing in the City of New Orleans and nationwide. One of the hurdles for EVs and PHEVs is the number of residences in our community that do not have off street parking which would allow an owner to charge their vehicle at home. According to the US Department of Energy, most EV/PHEV drivers do more than 80% of their charging at home, supplementing with workplace and public charging. The Southeast Louisiana Clean Fuel Partnership, a US Department of Energy-designated Clean Cities Coalition housed at the Regional Planning Commission, compiled the information below to assist the City of New Orleans in their consideration of allowing on-street electric vehicle chargers to accommodate potential EV/ PHEV owners who do not have off street parking.

Section 1 provides an overview of the types of electric vehicle chargers.

Section 2 reviews considerations and best practices for on-street EV chargers.

Section 3 discusses City Departments that may be involved in the process of installing on-street EV chargers. Section 4 notes other agencies and organizations that may also be involved.

Section 5 discusses applicable standard codes and regulations.

Section 6 provides example policies and requirements from the Philadelphia Parking Authority’s and the City of Berkeley’s on-street EV charging programs.

Section 7 includes a list of resources used in compiling this document.

Acronyms and Terms used in the document include:

- **EV**: Electric Vehicle
- **EVSE**: Electric Vehicle Supply Equipment (commonly, EV Charger)
- **PHEV**: Plug-In Electric Vehicle
- **AC**: Alternating Current (the type of current typically available at a residence)
- **DC**: Direct Current (requires special installation)
- **Charger**: The device used to charge an electric vehicle or plug-in electric vehicle.
- **Vehicle Charging Port or Inlet**: The place on the vehicle where the charger is plugged in to charge the vehicle.
- **ADA**: Americans with Disabilities Act
1.0 Types of Electric Vehicle Chargers

There are three major categories of electric vehicle chargers, based on the maximum amount of power the charger provides to the car battery from the grid:

- **Level 1**: Provides charging through a 120 Volt AC plug and does not require installation of additional charging equipment. Can deliver 2 to 5 miles of range per hour of charging. Normally, the vehicle needs to be plugged in for 6-10 hours for a complete charge (times vary depending on vehicle and how depleted the battery is).

- **Level 2**: Provides charging through a 240 Volt (for residential) or 208 Volt (for commercial) plug and requires installation of additional charging equipment. Can deliver 10 to 60 miles of range per hour of charging. Normally, the vehicle needs to be plugged in for 2-6 hours for a complete charge (times vary depending on vehicle and how depleted the battery is).

- **DC Fast Charge**: Provides charging through 480 Volt AC input and requires highly specialized, high-powered equipment as well as special equipment in the vehicle itself. (Plug-in hybrid electric vehicles typically do not have fast charging capabilities.) Can deliver 60 to 100 miles of range in 20 minutes of charging. Used most often in public charging stations, especially along heavy traffic corridors. Normally, the vehicle needs to be plugged in for about 30 minutes for a complete charge (times vary depending on vehicle and how depleted the battery is).

<table>
<thead>
<tr>
<th>Electric Service</th>
<th>Charge Rate</th>
<th>Miles per Hour of Charge*</th>
<th>Time to charge 70 miles*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>120V/ 20A</td>
<td>1.7 kW</td>
<td>About 5</td>
</tr>
<tr>
<td>Level 2</td>
<td>240V/ 20A</td>
<td>3.4 kW</td>
<td>About 12</td>
</tr>
<tr>
<td>Level 2</td>
<td>240V/ 40A</td>
<td>7.2 kW</td>
<td>About 24</td>
</tr>
<tr>
<td>DC Level 3 (Fast Charging)</td>
<td>480V (3 Phase)</td>
<td>50 kW</td>
<td>About 165</td>
</tr>
</tbody>
</table>

*Assumes 300 DC Watt-hour/mile and does not include charging efficiency

Summary table from “An Introduction to Vehicle Electrification” presentation by Kevin Stutenberg at the Center for Transportation Research at Argonne National Laboratory

Most residential electric vehicle on-street chargers are Level 2 chargers which allow owners to fully charge their vehicles overnight. Level 2 on-street pedestal-mounted EV chargers typically have a footprint of roughly 13 – 18” by 6 – 14” plus the area needed for the cord if stored looped on the side of the charger.

2.0 Considerations and Best Practices for On-Street EV Chargers

The following considerations and best practices may be helpful in developing guidance for installing on-street EV chargers:

- **Location**:
  
  Considerations:
  - How many EV chargers are allowed per block/ given distance?
  - Are the spots designated as EV only parking spots? Can other EVs park there even if they aren’t charging?
  - Length of parking space: Is the sufficient space in front of the property for a parking space?
- Is the spot in a limited hourly parking area or a metered space?
- Are their plans for significant rehabilitation or realignment for the on-street charger location?
- Does the style/ size/ placement of the charger fit with the surrounding neighborhood?

Best Practices:
- The proposed EV parking space should not be in any location where parking is currently prohibited by state or local law or within 6 feet of a fire hydrant.
- No garage, driveway, or other location not in the right of way is available to the applicant for parking of the Electric Vehicle.
- The location should avoid interference with vehicular sight lines at street corners or driveways and minimize the removal of vegetation.
- Since many EVs have charge ports near the front of the vehicle, the last parking space on a block in the direction of travel is recommended to minimize cord management. It also places the user closer to crosswalks and curb ramps.
- Chargers should be placed near the front of the space to minimize the distance between the charger and the charge port on the vehicle.
- EV chargers should be placed at a safe distance from the curb (other cities recommend 24” from the curb but this might not be practical or realistic in New Orleans neighborhoods with narrow sidewalks and limited planting buffers between the sidewalk and the street).
- EV chargers should be placed so as to not block pedestrian access of the sidewalk including ADA considerations. This should include considering the cord placement during charging and when stored.
- Angle parking is preferred over parallel or perpendicular parking, because equipment is easier to protect and cord management is less an issue; however, most of the location in New Orleans are likely to be parallel parking spots as that is more predominant in neighborhood areas.
- If parallel parking, Single Ports are preferred to minimize cord management (as opposed to duel ports/ 2 charging ports per post).
- Sample configuration from Electric Vehicle Infrastructure: A Guide for Local Governments in Washington State:
### Installation:
Considerations:
- Who will pay for the installation?
- What permits/plan reviews/agreements will be required and what’s the process for obtaining the permits? (See Section 3.0)
- What fees are required to install the charger/designate the parking space for EVs? Will there be an ongoing annual fee?
- What side is the charge port on the vehicle most likely to use the charger? If it is on the street side, is there enough width to allow space for the charger and cord? Is there a bike lane adjacent to the parking space that may be impeded by the charger and cord when plugged in? If parallel parking, the cord may be exposed to moving traffic if the charging inlet on the vehicle is on the street side.

**Best Practices:**
- Installation should only be performed by a licensed Electrical Contractor and should conform to all relevant electrical codes.
- The electrical line from the residence to the charger should be placed below ground in order to avoid a tripping hazard. It should be required that Louisiana One Call (811) be contacted to ensure that there are no conflicts with underground utilities.
- Site plans for the installation should note the location of existing utilities to avoid conflicts as well as the location and size of the charger (including the stored cord) relative to the sidewalk and planting strip (between the sidewalk and the curb) to ensure that pedestrian access is not impeded.
- Cord length should be long enough to reach the vehicle charge port but not too long as to pose a hazard to pedestrians.
- Contact information should be provided on the EV charger to report any problems.
- If the charger is installed at the end of angle or perpendicular parking, guard post should be installed to protect the equipment.

### Operation & Maintenance:
Considerations:
- Who’s responsible for maintenance? Is a maintenance agreement needed with the City?
- Can others use the equipment? If so, who pays for the electricity? Current Louisiana Regulations prohibit charging for EV charging by the kilowatt hour unless the entity is a utility. This may be able to be changed either by the Louisiana Public Service Commission (which started looking into this a few years ago but the efforts have since stalled) or the New Orleans City Council.
- If parallel parking, the cord may be exposed to moving traffic if the charging inlet on the vehicle is on the street side.
- Will there be ongoing (e.g. annual) inspections from the City to ensure that the EV charger is in good repair?
- What happens when the EV registered to the adjacent property leaves? Most programs require the charger to be removed. Another option is to allow a grace period to allow the owner to purchase a new EV or to see if new owners own/plan to purchase an EV.

Best Practices:
- Cord should either be retractable or have a place to hang the connector and cord sufficiently above the pedestrian surface.

- **Signage**
  Considerations:
  - Signs immediately adjacent to the charger can be used to designate the space as an EV charging space.
  - If the charger will be available to the public, directional signs to the charger may also be helpful.

  Example Signage:
  Manual on Uniform Traffic Control Devices (MUTCD) Signage (Federal Highway Administration system) – D9-11b Alternate Version:

  ![Example Signage for designating a parking space](From Washington State Guidance)

- **Lighting:**
  Best Practices:
  - Chargers should be placed in areas with adequate lighting. Good lighting lessens the risk of tripping over the cord or damage to the equipment. This is especially important if the charge port on the vehicle is on the street side of the vehicle as most vehicles are likely to be charged at night.

- **Application Process & Fees**
  - Most existing programs to support on-street EV chargers involve an initial application followed by a permit process. The permit process typically follows the same process as for other electrical and on-street improvement projects.
  - The initial application normally includes a site plan and photographs of the area to determine how the charger will fit into the given environment.
  - Fees may include:
- Initial Application Fee
- Installation/ Permit Fees
- Inspection Fee
- Annual Renewal Fee

**Interim Planning:**

**Consideration:**

- Most on-street EV charging programs require that the applicant own the vehicle prior to requesting permission to install an on-street EV charger. This can create logistical issues for the EV owner for the period between when the vehicle is purchased and when residential charging is available. The City may want to consider an interim plan such as allowing EV owners to use an extension cord connected to a normal outlet with a brightly colored drop over cord cover to allow the owner to charge the vehicle overnight while lessening the risk of trips and falls due to the cord crossing the sidewalk.

### 3.0 City Departments that May be Involved

Various City departments will likely have a role in the process to ensure that on-street electric vehicle chargers comply with City regulations. The departments and their role(s) listed below are based on the Clean Fuel Partnership’s/ Regional Planning Commission’s knowledge of City operations and discussions with the City as part of our EV Network efforts. Other departments may be involved while some of those listed below may not need to review each application. City personnel are encouraged to use this list as a starting point for developing a clear process that outlines the various steps and departments involved for those interested in installing an EV on-street charger.

- **Building Permits & Licenses**
  - Mechanical/Electrical Permit: Installing EV chargers typically falls within normal permitting procedures in Orleans Parish in which small projects (under $15,000) can receive permits within one day to begin construction with a required inspection prior to activating the station.
  - Street: Utility/ Service Cut Permit
  - Utility Connection Permit/Process?

- **City Attorney’s Office**
  - Setting up a Liability Agreement
  - Ownership & Maintenance Agreement for the charger

- **Department of Public Works**
  - Jurisdiction over Public Right of Way
  - Approval of placement standards
  - May help with lining up parking spots to ensure there’s adequate space for the EV and surrounding vehicles to park
  - May be involved in designating EV Only parking spots (per Philadelphia Parking Authority example)

- **Planning**
  - Determine if this would require a change to the Comprehensive Zoning Ordinance (CZO); The current CZO only addresses off street EV chargers:
CZO, Article 21: "Electric vehicle charging is permitted as an accessory use in all parking lots and structures, as well as part of a gas station use. An electric vehicle charging station shall not be counted as a required vehicle parking space, but are subject to the yard restrictions for off-street parking in the underlying districts."

- **ADA Coordinator**
  - Sidewalk access
  - ADA access to charging stations/ recommendations for on-street EV charger placement that may be used by persons with disabilities – See examples in Washington State Guidance, Section 3.3 starting on page 24

- **Historic District Landmarks Commission**
  - Although the HDLC does not have jurisdiction over the public right of way, it may be helpful to inform them where chargers are being installed and consult them on the design and placement of the chargers.

- **Other Departments as needed**

4.0 **Other Agencies/ Organizations that May Be Involved**

Other agencies and organizations that may be involved include:

- **Louisiana Dept. of Transportation & Development**: If the proposed charger is located on a State Highway, LaDOTD may need to be consulted.

- **Louisiana State Public Service Commission**: Currently, Louisiana regulations only allow utilities to charge by the kilowatt hour for the use of an electric vehicle charger. If the proposed charger will be used by the general public and the owner intends to charge for charging, the Louisiana Public Service Commission and/or the City Council should be consulted to determine if current regulations need to be amended.

- **Entergy New Orleans**: Because the charger would result in an additional load on the electrical system, it would be helpful to inform Entergy New Orleans of planned stations so they can ensure the electrical grid in the proposed area can accommodate the additional load. While one charger is not likely to have a significant impact, several chargers in one cluster may require an upgrade. Entergy does not expect this to be a major issue but the more notice they have of the location of future chargers, the better they are able to plan ahead to accommodate the load in a timely manner.

- **Local Car-Share Programs**: It would be helpful to keep local car share companies informed as publicly available on-street chargers are installed especially in the downtown area as this may encourage them to incorporate EVs and PHEVs into their fleets.

5.0 **Applicable Codes and Regulations**

The National Renewable Energy Laboratory’s (NREL’s) *Electric Vehicle (EV) and Infrastructure Codes and Standards Chart* ([www.afdc.energy.gov/pdfs/48604.pdf](http://www.afdc.energy.gov/pdfs/48604.pdf)) provides an overview of the codes and standards that apply to electrical wiring for EV chargers, including underground installation. In particular, the dispensing codes and standards for vehicle charging stations, charging station components, and general construction requirements would apply. The controlling authorities for these standards are the National Fire Protection Association (NFPA), Underwriters Laboratory (UL), and International Code Council (ICC).
Appendix B: Summary of EVSE Standards of the EV-Ready Codes for the Built Environment publication lists applicable standards for EV chargers including:

<table>
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<tr>
<th>Organization/Code Text</th>
<th>Standard</th>
<th>Description</th>
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<tbody>
<tr>
<td>Society of Automotive Engineers (SAE)</td>
<td>J1772</td>
<td>Electrical and mechanical aspects of the cord set, references Underwriters Laboratory for safety and shock protection and the National Electrical Code for cord and coupler</td>
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<td>J2293</td>
<td>Electric vehicle (EV) energy transfer system</td>
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<td>J2293-1</td>
<td>Functionality requirements, system architecture</td>
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<td></td>
<td>J2293-2</td>
<td>Communication requirements, system architecture</td>
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<td>NEC 110.11</td>
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<td>NEC 110.28</td>
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<td>NEC 110.27 (B)</td>
<td>Guarding of live parts to prevent physical damage</td>
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<td>NEC 210.70 (A) (2)</td>
<td>Lighting outlets required, dwelling units</td>
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<td>NEC 300.4</td>
<td>Protection of conductors against physical damage</td>
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<td>NEC 300.5</td>
<td>Minimum cover requirements for underground installations</td>
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<td>NEC 334.15</td>
<td>Exposed work safety requirements</td>
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<td></td>
<td>NEC 334.30</td>
<td>Securing and supporting nonmetallic sheathed cable</td>
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<td>NEC 625.1-625.5</td>
<td>General instructions for electric vehicle supply equipment (EVSE): scope, definitions, other articles, voltage, listed/labeled</td>
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<td>NEC 625.9 (A-F)</td>
<td>Wiring methods for EV coupler</td>
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<td>NEC 625.13-625.19</td>
<td>EVSE equipment construction</td>
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<td>NEC 625.21-625.26</td>
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<td>NEC 625.28-625.30</td>
<td>EVSE supply equipment locations</td>
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<td>NEC 626</td>
<td>Electrified truck parking spaces</td>
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<td>Underwriters Laboratory (UL)</td>
<td>UL 62</td>
<td>Flexible cords and cables: required by NEC 625</td>
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<td>UL 2202</td>
<td>EVSE charging station design and construction</td>
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<td>UL 2231</td>
<td>Charging station shock prevention: grounding and ground fault interruption</td>
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<td></td>
<td>UL 2251</td>
<td>Cord design and safety of plug, cord, receptacle, connectors, load rating</td>
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<tr>
<td></td>
<td>UL 2594</td>
<td>Charging station safety: on-board equipment supplying power to vehicle</td>
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6.0 Example Requirements and Policies

Philadelphia Parking Authority

The Philadelphia Parking Authority has an Electric Vehicle Parking Space program to allow residents who own EVs or PHEVs to install EV chargers on the street in front of their property. Once the application is approved and the EV charger is installed, the Philadelphia Parking Authority will install “EV Only” parking signs for the space. The program includes the following components (www.philapark.org/2015/10/electric-vehicle-charging-stations-everything-you-need-to-know/):

Required Proposed Electric Vehicle Parking Space Application Information:

- Address - Street Address, City, State, Zip Code
- Are you the owner of the address for the proposed electric vehicle parking space? If No, please obtain consent from the property owner of the proposed address, stating that they have no objection to an electric vehicle parking space being installed on their property on the provided consent form.

- Is the proposed property 20 feet in width? If No, please obtain consent from one of your neighbor’s, stating that they have no objection to an electric vehicle parking space infringing upon their property on the provided consent form.

- Make, Model, Year & Vehicle Length
- Vehicle Registration showing the EV/PHEV is registered to the address where the space is sought
- Proof of Owner Occupancy: Driver’s License showing the address where the space is sought or either two utility bills or a typed lease to the address where the space is sought
- A clear photograph showing the entire area in which the electric vehicle parking space would be located, and the front of all property abutting the proposed electric vehicle parking space
- $50 Non-Refundable Application Fee

Once the initial application is approved, the applicant applies to the Department of Licenses & Inspections for a curb side electric outlet. Code requirements and recommendations include:

- Installations shall follow the current National Electrical Code and must be performed by a Licensed Electrical Contractor with an electrical permit from Licenses & Inspections.
- All conductors and equipment used for the installation, including the cord used to connect the vehicle to the receptacle, shall be approved, identified, labeled and listed suitable for the specific purpose, environment and application.
- Receptacle must be located on a dedicated branch circuit with ground fault circuit protection located in the main panel.
- A shut-off switch for the receptacle must be installed inside the building at the exit.
- The receptacle must be tamper-resistant and located within an outdoor, weatherproof, hinged, lockable enclosure to prevent accidental or intentional contact.
- Location of receptacle must be no higher than 48 inches.
- There shall be no commercial uses associated with the use of the receptacle.
- Electrical permit must be obtained prior to installation of electrical box.

After the installation of a properly functioning Electric Vehicle Charger, the Philadelphia Parking Authority will post the required signs designating the Electric Vehicle Parking Space. Requirements and policies related to the EV parking space include:

- The proposed EV parking space must be no more than 20 feet in length, unless a greater length is necessary based on the size of the vehicle.
- The proposed EV parking space shall not be in any location where parking is currently prohibited by state or local law.
- No garage, driveway, or other location not in the right of way is available to the applicant for parking of the Electric Vehicle.
- The number of reserved on-street parking spaces, of any kind, on a hundred block, does not exceed:
  - On blocks with single-sided parking: three (3)
  - On blocks shorter than 500 feet in length, with parking on both sides: four (4)
  - On blocks that are 500 feet or longer in length, with parking on both sides: five (5)
- The Philadelphia Parking Authority shall not approve an EV parking space where the applicant is liable for any delinquent fines or penalties (i.e., has three open tickets or more).
- Installation Fee, to be paid upon approval by the Department of Licenses & Inspections:
  - Center City & University City area: $500 per metered space removal or $250 per 20 feet of space
  - All other areas of the city: $300 per metered space removal or $150 per 20 feet of space
- Yearly Renewal Fee:
  - Center City & University City area: $150 per year
  - All other areas of the city: $75 per year
  - An EV parking space may be revoked, and the EV parking space and EV charger may be removed by the Philadelphia Parking Authority if such yearly renewal fee is not timely paid in accordance with the program
- The person to whom an EV parking space has been issued shall immediately notify the Philadelphia Parking Authority, and the EV parking space may be immediately revoked, if any of the following events occur:
  - The registration or license plate is transferred to a Non-Electric Vehicle
  - The Electric Vehicle is transferred to another owner who does not reside at the address for which the EV parking space was established
  - The owner of the Electric Vehicle ceases to reside at the address for which the EV parking space was established
- An EV parking space may be revoked under any of the following circumstances:
  - Any condition necessary for the grant of the EV parking space under the regulation ceases to be met
  - The EV charger or its associated wiring is not maintained in good repair or presents a hazard due to deterioration, malfunction or improper use
  - Any excavation of the right of way for installation or maintenance of the EV charger or associated wiring is not properly restored
- An EV parking space should not be treated as a personal parking spot. Anyone with an electric vehicle is allowed to park in the EV parking space. Any abuse of the EV parking space (i.e., cones, telling other electric vehicle operators they are forbidden to park in the EV parking space, etc.) will result in the removal of the space.

**City of Berkeley**

The City of Berkeley started a pilot program in December 2014 to allow up to 25 on-street EV chargers to be installed at residences that do not have access to off street EV charging. Berkeley also received grant funding from The 11th Hour to help offset the permitting costs (up to $2,000 per charger). The information below is a summary of their Pilot Manual: Residential Curbside Electrical Vehicle (EV) Charging Pilot: www.cityofberkeley.info/uploadedFiles/Planning_and_Development/Level_3_-_Energy_and_Sustainable_Development/Manual%20with%20attachments%2012-1-14.pdf.

Berkeley’s program requires:

- An Initial Inquiry Form: The process starts with an Initial Inquiry Form to determine if the site is eligible for on-street EV charging, i.e. there are no options for placing the EV charging at an off-street location.
- A neighbor handout: this informs the neighbors about the planned on-street EV chargers and allows them an opportunity to ask questions and understand the process.
- A Minor Encroachment Permit: this permit is used when structures are built on the public right-of-way; as part of the review process, notices are placed on the street to inform neighbors about the proposed EV charger and allow for formal public comment.
- An Engineering Permit for excavation and construction in the public right-of-way.
- An Electrical Permit to install the EV charging station.

Requirements of the Berkeley Pilot Program include:

**Placement:**
- Avoid conflicts with other utility infrastructure (existing utilities and laterals must be shown on site diagram for permit application)
- At least 6 feet from fire hydrants
- Avoid interference with vehicular sight lines at street corners or driveways
- Minimize the removal of vegetation
- Maximize the number of parking spaces it could serve
- EV charging station cords may not cross sidewalks, walkways, or driveways
- At least 18 inches from the face of the curb (in the planting strip if one is present)
- Preserve as much sidewalk width (path of travel) as possible, but no less than 3 feet

**Design:**
- Position the EV charging station such that the stored connector is at a height of 24 inches to 48 inches above the parking surface (Electrical Code, Article 625.30(B))
- Consider an enclosure or cage around the EV charging station to protect and control its use; if the charging station is not fully enclosed, the charging station cord and connector must be secured when not in use
- Orient the EV charging station such that an enclosure door will not open past the curb face or over the sidewalk
- Minimize the size of any enclosure around a charging station or cord
- Colors and materials for any enclosure should minimize their visibility and integrate with the design of surrounding buildings and landscaping
- No advertising is permitted on the charging station or associated enclosure. The City of Berkeley will place an informational sign/sticker on the charging station.

If the charger is for private use, its use must be controlled with a safety enclosure or cord that is locked when not in use. If the charger is available to the public, its placement and location must be accessible (ADA compliant) and available, free of charge, at all times.

If there is space on the front side of the property but no current parking spot/driveway, the City allows participants in the program to install a curbscut and driveway approach on the public right-of-way and construct a front yard space (“vehicle-related paving”) for EV charging. This option must be considered before opting to install an on-street EV charger. The vehicle-related paving is not considered an off-street parking space per their Zoning Ordinance. Its use is deed restricted to charging a plug-in EV and its construction is only permitted through the Pilot program. Property owners must sign and record a Declaration of Restrictions on Use of Vehicle-Related Paving. Additional requirements include the use of permeable surfaces and landscape screening strips. The total pavement amount must not exceed more than 50% of the total front yard.
Berkeley’s program does not allow for designated “EV Only” parking spaces. The parking space near the charger continues to be public parking and conforms to residential parking/time limits. Berkeley requires that a sign/sticker be posted on the curbside EV charging station to state that the charger is a private installation but that the parking space is available to the public.

7.0 Resources

Information in this packet was compiled from various resources including:

- US Dept. of Energy’s Alternative Fuel Data Center: [www.afdc.energy.gov](http://www.afdc.energy.gov)
- Philadelphia Parking Authority: The Philadelphia Parking Authority has program to approve the installation of an on-street EV charger as well as have the parking authority install EV Only parking signs for the space: [www.philapark.org/2015/10/electric-vehicle-charging-stations-everything-you-need-to-know/](http://www.philapark.org/2015/10/electric-vehicle-charging-stations-everything-you-need-to-know/). The application has the additional considerations for the location of the charger which were included in this document: [http://philapark.org/wp-content/uploads/2014/03/EVPS-Application.pdf](http://philapark.org/wp-content/uploads/2014/03/EVPS-Application.pdf)
- EV-Ready Codes for the Built Environment prepared for New York State Energy Research and Development Authority and Transportation and Climate Initiative, prepared by: WXY Architecture + Urban Design, Bruce J. Spiewak, AIA, Consulting Architect, LLC, and Energetics Incorporated; November 2012: [www.transportationandclimate.org/sites/default/files/EV-Ready_Codes_for_the_Built_Environment_0.pdf](http://www.transportationandclimate.org/sites/default/files/EV-Ready_Codes_for_the_Built_Environment_0.pdf)
- Siting and Design Guidelines for EVSE details site design elements and provides guidelines for local governments, developers, homeowners, businesses, and utility providers interested in best practices for EVSE implementation. Schematics of site design elements and installation scenarios are also provided: [www.ct.gov/deep/lib/deep/air/electric_vehicle/ev_siting_and_design_guidelines.pdf](http://www.ct.gov/deep/lib/deep/air/electric_vehicle/ev_siting_and_design_guidelines.pdf)
- Information also provided by Clean Cities Technical Response Service which supports the U.S. Department of Energy and National Renewable Energy Laboratory: [technicalresponse@icfi.com](mailto:technicalresponse@icfi.com) / 800-254-6735:

The information above is provided for informational purposes only to assist the City of New Orleans in determining if on-street EV chargers are a viable option for the City and if so, in developing a process for their installation and operation. Information was compiled from various sources and may or may not be applicable to the laws of Louisiana or incorporate all the considerations relevant to the City of New Orleans. The City is encouraged to use this document as a starting point for ongoing discussions and evaluation of on-street EV chargers.