

Waters Landing EV Charging Station Installation – Lessons Learned

Background

The Electric Vehicle (EV) Charging Station Committee was formed to assist homeowners with installing charging stations on their property.

- **Garage or driveway homeowners:** Free to install any type of charging station, subject to submitting an AERC application for any *exterior* components visible from the street.
- **Townhouse/condo homeowners without a garage or driveway:** Must follow an extended process developed through this committee's prototype effort.

Approval Process

Installation requires two stages:

1. **Private property work** – Placement of equipment on your property. Requires an AERC application.
2. **Common area work** – Any installation affecting sidewalks or parking lots owned by Waters Landing Association (WLA). Requires a separate AERC common-ground application.

Additional requirements:

- Homeowners must obtain supplemental homeowner's insurance. (\$1 Million liability policy) This is cheaper than you might think.
- An indemnification agreement with WLA must be signed, making the homeowner responsible for any damage or incidents involving the installation.
- Documents available on the WLA website:
 - License and Indemnification Agreement
 - Installation, Maintenance, and Indemnification Agreement

Safety Considerations

- Extra insurance ensures coverage for accidents or damage.
- Risks include tripping over charging cords, electrical hazards, and snow removal issues (e.g., hidden cords damaged by snowblowers).

Existing Prototypes

Two pilot installations are in place:

- Waters Edge Neighborhood
- Harbor Place Neighborhood

Both involve equipment inside the home, up to the property line, and extending across WLA sidewalks into parking lots.

Application Process

- All homeowners (with or without garages) must submit an AERC application.
- Additional steps apply only to townhouse/condo residents without garages or driveways who must run cable across WLA sidewalks.
- Extra costs are expected, but savings from home charging, especially off-peak, often offset these within a year.

Installation Steps (Typical)

1. Hire a licensed electrician (vendors available via Thumbtack). They will:
 - Install a dedicated 240V circuit breaker in the home.
 - Call Miss Utility to schedule a visit to verify no other service utility cables exist in the location of your installation.
 - Install an exterior junction box.
 - Dig and trench from the junction box to the property edge.
 - Install and wire a pedestal and EV Charger at the property edge.

2. Use an approved concrete vendor (e.g., Brothers Paving, endorsed by WLA HOA) for sidewalk modifications. Contact WLA for details. Concrete vendor will:
 - Install a cable channel product across sidewalks (recommended: **NDS channel drain** from Lowe's or Home Depot, mini-width with snap-in plastic cover).
 - Alternative: StormGuard (UK product, aluminum channel with bristles). Working on US Distributor

Lessons Learned

- Performance of channels in snow and ice is still being evaluated.
- Channels may require periodic maintenance to remove debris.

Recommended Usage

- Use a charging app to schedule charging during off-peak hours for savings (e.g., Tesla App).
 - Example: Potomac Edison rates are up to ~4¢/kWh cheaper from 11:01 PM to 5:59 AM when subscribed to their EV Charged program.

Costs

- Installation may cost several hundred to several thousand dollars, depending on the installation work needed + Charging hardware.
- Long-term savings on charging outweigh initial expenses.

Conclusion

The EV Charging Station Committee is available to guide homeowners through the process and suggest qualified contractors.

The AERC is available to support with applications and approvals.