

COMMERCIAL DC FAST CHARGING INFRASTRUCTURE

350 kW EV Charging Installation



Location: Tewksbury, Massachusetts

Scope:

BD's scope included:

- Installation and wiring of 350 kW Autel DC fast chargers
- New electrical distribution equipment
- Coordination and installation associated with a new utility transformer
- Underground conduit and duct-bank construction
- Excavation, trenching, and site work
- Concrete equipment pads and foundations
- Feeder and branch-circuit installation
- Grounding and bonding
- Charger terminations and electrical connections
- ADA-compliant sidewalk and accessible charging-area improvements
- Bollards and equipment protection
- Testing and commissioning



High-Power EV Charging Infrastructure for an Active Hotel

BD Electrical & Solar completed the site and electrical construction for a commercial DC fast charging installation at an active hotel property in Tewksbury, Massachusetts. The project required substantially more than installing EV chargers. Supporting multiple 350 kW Autel DC fast chargers required new utility infrastructure, high-capacity electrical distribution, extensive underground raceways, equipment foundations, and site improvements while maintaining access to the operating hotel.

Building the Infrastructure Behind DC Fast Charging

At 350 kW per charger, DC fast charging places significant demands on a property's electrical infrastructure. The installation required a new utility transformer and dedicated distribution equipment capable of supplying the charging equipment.

BD constructed the underground electrical infrastructure connecting the utility service, distribution equipment, and individual charging locations. Multiple conduit pathways were installed before concrete placement and final site restoration, requiring careful coordination between civil and electrical construction.



Construction at an Active Hotel

The hotel remained operational throughout construction.

Excavation, concrete work, equipment deliveries, utility work, and electrical installation all had to be coordinated around hotel guests, employees, parking, and normal vehicle traffic. Work areas were sequenced to maintain safe access while allowing construction to progress. An ADA-compliant sidewalk and accessible route were also incorporated into the finished charging area, integrating the new infrastructure into the existing property.



Turnkey Commercial EV Infrastructure

The completed project provides the property with high-power DC fast charging backed by purpose-built utility and electrical infrastructure.

From underground site work and concrete through distribution equipment and final charger connections, BD delivered the electrical and civil scope required to take the project from construction through an operational commercial EV charging site.

For commercial properties, fleet operators, developers, and charging networks, projects at this scale require an electrical contractor capable of managing both the chargers and the infrastructure behind them.

