





# A New Workforce Development Program for Electric Vehicle Supply Equipment Training

In September 2021, the Los Angeles County Internal Services Department received a \$300,000 grant from the LA Department of Water and Power to install electric vehicle supply equipment (EVSE) at Olive View Medical Center. The grant included \$15,000 to provide materials and equipment to the California Conservation Corps' (CCC) Norwalk Energy Corps for EVSE training. The CCC provided over \$150,000 in matching funds to work with Cerritos College to develop an EVSE installation curriculum.

10 Corpsmembers and one Supervisor participated in the 40-hour Cerritos College training, which included

classroom and lab instruction, and an overview of career pathways and union apprenticeships. The training prepared Corpsmembers to join electricians and a project manager onsite at Olive View to assist with the removal of 17 Level-1 chargers, four Level-2 chargers, and install new EVSE including Level-2 charging stations and networking equipment. Corps-members spent 90 hours on-site with the County electricians who were Electric Vehicle Installation Training Program certified. On June 16, 14 new chargers went live with the help of the CCC crew, enabling employees to power up their EVs faster than before.

"It makes me more employable and creates more opportunities. That's what the CCC is all about." -Tricia Andrews, EVSE Training Participant and Corpsmember

### **Corpsmembers Input**

### **Appreciated learning**

- Basic wiring
- Pipe bending
- Running wire
- Trenching
- Concrete calculations

### Want more experience

- Learning terminology
- Using power tools (concrete saw, pneumatic punch)
- Practicing calculations
- Reading site drawings
- Reviewing the code book
- Installing EVSE powered by solar

## **Classroom and Lab Instruction**

#### Classroom instruction covered

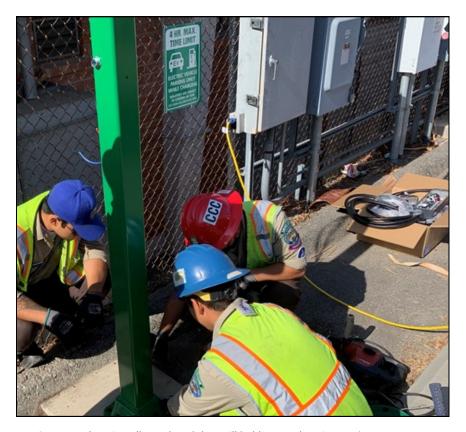
- Electrical and electronics principles
- EV and hybrid vehicles
- EV charging technology
- Calculations
- Electrical safety and hazard management
- Electrical tools
- Maintenance, repairs and replacement

#### Labs covered

- Bending pipe
- · Cutting conduit
- Pulling wire
- Mounting a charger to a wall
- Laying a concrete pad







Corpsmembers install a pedestal that will hold an EV charging station

## **On-Site Experience with Certified Electricians**

During their 90 hours on-site, the corpsmembers and electricians discussed career pathways and union apprenticeships. Corpsmembers learned from the electricians and assisted with:

- Removing Level-1 chargers
- Reading construction drawings
- Trenching
- Running conduit (underground, overhead, and surface mount)
- Calculations and sizing wire
- Concrete calculations
- Framing concrete
- Measuring, cutting, securing rebar
- Terminating wires
- Anchoring equipment
- Mounting electrical disconnects, panels, and transformers
- Installing polls and chargers







# **Recommended Practices** for Success

- 1. Hold a kick-off meeting introducing the project
- 2. Agree to timeline and schedule during kick-off
- 3. Identify CCC site lead for each day of project
- 4. Provide list of materials and tools that CCC needs to bring to site each day, such as
  - ⇒ Electrician's tools
  - ⇒ Shovels and wheelbarrows
  - ⇒ Concrete saw
- 5. Provide wish list of tools and tasks CCC is trained on before coming onsite
  - ⇒ Taking measurements
  - ⇒ Doing calculations
  - ⇒ Conduit and wire sizes
  - $\Rightarrow$  How to use tools
  - $\Rightarrow$  Trenching
- 6. Determine who will purchase construction materials
- 7. Hold a Safety Minute at the beginning of each on-site day
- 8. Allow time for learning and asking questions on-site
- 9. Create opportunities for corps to see different stages of process, such as
  - ⇒ 811 dig alert
  - $\Rightarrow$  Inspection
- Hold weekly check-ins with Project Manager, CCC Supervisor, and CCC manager

