Electric Vehicle Charging Stations
Broward Garages & Fleet Services
Welcome Aboard!

Environmental Protection and Growth Management

Electric Vehicle Charging Stations
Broward Garages & Fleet Services
EMISSIONS REDUCTIONS
COUNTYWIDE (80%) AS PART OF COUNTY OPERATIONS (12%) AND WILL BE VITAL TO SUPPORTING THE COUNTY’S UNDER 2 MOU 2018 COMMITMENT TO A CLEAN FLEET BY 2030.

12% of Broward County Operation

PRESS ENTER TO CONTINUE
THE FOUR (4) BROWARD COUNTY SITES PROPOSED FOR EV CHARGING STATIONS
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SITE #1
GOVERNMENT CENTER
EAST
350 GARAGE

SITE #2
FLEET SERVICES NO. 2 PARKING LOT

SITE #3
GOVERNMENT CENTER WEST

SITE #4
FLEET SERVICES NO. 3/HIGHWAY BRIDGE MAINTENANCE PARKING LOT
Schemes 1 thru 3

- Scheme Number 1: BEV capacity with no upgrades to FPL infrastructure and only minimal site-specific improvements to County infrastructure.

- Scheme Number 2: BEV capacity with an agreed upon moderate (i.e. intermediate) scenario involving the installation of a moderate amount of higher capacity infrastructure available from FPL, and associated moderate site-specific improvements to County infrastructure. This may include a single maximum 3,000 amp service to the site from FPL.

- Scheme Number 3: BEV capacity with maximum electrical capacity based on the installation of the highest capacity infrastructure available from FPL, and associated site-specific improvements to County infrastructure. This may include multiple 3,000 amp services to the site from FPL.
1. Government Center West Garage
   1 North University Drive, Plantation, Florida 33324
   Scheme Number 1: 0 parking spaces $0
   Scheme Number 2: 182 parking spaces $1,000,000
   Scheme Number 3: 364 parking spaces $3,500,000

2. Fleet Parking Number 2 Parking Lot
   2515 S.W. 4th Avenue, Fort Lauderdale, Florida 33315
   Scheme Number 1: 10 parking spaces $60,000
   Scheme Number 2: 62 parking spaces $880,000
   Scheme Number 3: 124 parking spaces $1,480,000

3. Government Center East 1200 and 350 Garage
   101 S.W. 1st Avenue, Fort Lauderdale, Florida 33301
   3A - 1200 Scheme Number 1: 0 parking spaces $0
   3A - 1200 Scheme Number 2: 42 parking spaces $700,000
   3A - 1200 Scheme Number 3: 84 parking spaces $1,300,000
   3B - 350 Scheme Number 2: 100 parking spaces $1,460,000

4. Fleet Services Number 3/Highway Maintenance Parking
   1600 Blount Road, Pompano Beach, Florida 33069
   Scheme Number 1: 22 parking spaces $270,000
   Scheme Number 2: 202 parking spaces $1,940,000
   Scheme Number 3: 404 parking spaces $4,100,000
EV Fast Chargers (Level 3) & EV Steady Chargers (Level 2)
The EV Management Controller (EVMC) by Cyber Switching, a PowerIOT Endpoint, provides intelligent power management to 3rd party EV chargers (EVSEs). Power is optimized across the entire premises when coupled with the Building Master Controller (BMC).
E-Mon Meter will measure electrical usage by EV Chargers
SITE NUMBER 1: Government Center West Garage
1 North University Drive, Plantation

Photo: Proposed location of new electric room or exterior pad mounted electrical equipment at northeast corner of existing parking garage.
Photo: Existing main electric room on southeast corner of the building.
The existing 1200 garage is served with multiple electric services in various locations from the existing FP&L vault. The plan is to place the electric vehicle chargers for this garage on the second level of the parking garage above the existing FP&L vault.

There will be no scheme 1, as we are tapping into the existing vault, which is the same effort as scheme 2 and 3.

Schemes 2 and 3 will be dependent upon what the existing FP&L vault can support in conjunction with schemes 2 and 3 of the 350 garage, which is served from the same FP&L vault.
Scheme 1:
The Fleet Maintenance Building at this location is fed from an existing vault in the main building on the north end of the site. Based on the maximum kWD last year of 69; we believe that it is possible to support up to 20-24 vehicles near and around this building.

Scheme 2:
A new FP&L pad mounted transformer could be set as shown on the supplemental electrical sheet that would feed outdoor rated, weatherproof, electrical distribution equipment mounted on a concrete pad. It is preferable that the electrical distribution equipment be enclosed in a new electric room at the same location.
The new electrical service would be capable of feeding two fast chargers and 100 Clipper Creek chargers for a total of 202 parking spaces. This new electrical service would be 2500 amps at 120/208 volts, 3 phase, 4 wire.

Scheme 3:
A new FP&L pad mounted transformer could be set as shown on supplemental electrical sheet that would feed outdoor rated, weatherproof, electrical distribution equipment mounted on a concrete pad. It is preferable that the electrical distribution equipment be enclosed in a new electric room at the same location. The new electrical service would be capable of feeding four fast chargers and 200 Clipper Creek chargers for a total of 404 parking spaces. This new electrical service would be 5000 amps at 120/208 volts, 3 phase, 4 wire.
Solar Projects at Night

At night, green LED rings illuminate the Shelter that were charged by the solar panels during the day.
EV-Solar Projects in Public Parking Spaces
Stay tuned, for Team’s Smart EV Charging solutions!

CONSTRUCTION MANAGEMENT DIVISION

PUBLIC WORKS DEPARTMENT

ARIADNA MUSARRA, AIA, LEED AP
DIRECTOR / COUNTY ARCHITECT

Music: https://www.bensound.com/royalty-free-music