

# POMPANO BEACH COMMUNITY REDEVELOPMENT AGENCY

Meeting Date: February 16, 2016

Agenda Item 3

**REQUESTED CRA BOARD ACTION:**

Resolution                       Consideration                       Approval                       Other

**SHORT TITLE OR MOTION:**      A RESOLUTION OF THE POMPANO BEACH COMMUNITY REDEVELOPMENT AGENCY APPROVING AND AUTHORIZING THE PROPER OFFICIALS TO ISSUE A PURCHASE ORDER TO BURKHARDT CONSTRUCTION, INC. IN THE AMOUNT OF \$72,160 FOR INSTALLATION, WARRANTY AND MAINTENANCE OF ELECTRIC CAR CHARGING STATIONS; PROVIDING AN EFFECTIVE DATE.

**Summary of Purpose and Why:**

Staff is seeking CRA Board approval of a Resolution authorizing issuance of a Purchase Order ("PO") to Burkhardt Construction Inc. (BCI) to furnish and install three (3) Car Charging Stations in the amount of \$72,160.00. The electric car charging stations were included in the scope of work of the original GMP contract with BCI (Resolution No. 2011-74). Although staff made provisions for these stations during the design and construction of streetscape improvements on Pompano Beach Boulevard and Harbor Village, the car charging stations were removed from the contract scope by Resolution No. 2011-73 due to lack of funding and project priorities. Since, funding for additional streetscape improvements is available and staff has identified Charge Point as a viable manufacturer. Charge Point has sold over 400,000 units across the U.S. and already has a presence in the City, having installed similar stations in the Whole Foods parking lot. The contract includes four (4) additional prepaid years of Charge Point Assure for onsite Parts and Labor and five (5) years of prepaid Commercial Network Plan. Because BCI constructed the original project, staff is recommending that BCI install the car charging stations.

**QUESTIONS TO BE ANSWERED BY ORIGINATING DEPARTMENT:**

- (1) Origin of request for this action: Pompano Beach CRA
- (2) Primary staff contact: Horacio Danovich, CIP Manager/CRA Engineer Ext. 7834
- (3) Expiration of contract, if applicable: \_\_\_\_\_
- (4) Fiscal impact and source of funding: \$72,160.00 (Streetscape Improvements account # 314-7519-539.65-12)

DEPARTMENTAL COORDINATION	DATE	DEPARTMENTAL RECOMMENDATION	AUTHORIZED SIGNATURE OR ATTACHED MEMO NUMBER

- CRA Executive Director
- CRA Attorney
- Finance Director

  
Claudia M. McKenna  
S. Sible

**ACTION PREVIOUSLY TAKEN BY CRA BOARD:** None

Resolution Results:	Consideration Results:	Other Results:



**MEMORANDUM**

February 2, 2016

TO: CRA Board

THRU: Kim Briesemeister, CRA Executive Director  
Chris Brown, CRA Executive Director

FROM: Horacio Danovich, CIP Manager

A handwritten signature in blue ink, consisting of several overlapping loops, is written over the "THRU" and "FROM" lines.

**Issue**

Staff is seeking CRA Board approval to issue a Purchase Order to Burkhardt Construction, Inc. ("BCI") to furnish and install three (3) Car Charging Stations (See Location Maps 1 and 2) in the amount of \$72,160.00.

**Recommendation**

The CRA Staff recommends Approval of the Resolution.

**Background**

On April 28, 2010, the CRA issued an RFP for a Construction Manager at Risk Contract Services for Various Streetscape and Roadway Improvements. BCI was selected and by Resolution No. 2011-74, the CRA approved a contract with a GMP of \$11,025,210.79. Included in the contract scope were electric car charging stations. Due to funding and project priorities, the electric car charging stations were removed from the contract scope by Resolution No. 2011-73. The CRA has determined that it now has funds available to do install the car charging stations. Because Burkhardt did the initial project, and because the electric car charging stations were contemplated by the initial contract, the CRA is recommending that the CRA approve a purchase order for Burkhardt to complete the work.

As a function of the overall design and construction of streetscape improvements in the East CRA, Staff had envisioned the installation of electric car charging stations strategically placed along Pompano Beach Boulevard and Harbor Village once funding became available. During the early design stages, Staff asked the design team to make provisions for electric supply services to allow for the installation of site furnishings such as charging stations (see Figures 1 and 2 pertaining to approved design plans dated 10/4/2011 and 12/16/2010, respectively). Since funding was limited and the CRA Board desired to include numerous



other design elements, Staff preferred and recommended to wait before selecting a specific technology to ensure widespread compatibility with an emerging market. As a result, the car charging stations were removed from the approved GMP. Since, the CRA has identified funds through a bond dedicated to continued expansion of streetscape improvements and a manufacturer (Charge Point) that has the credentials to make this project a success. At Staff's request, BCI provided a proposal (Exhibit "A"). Per said proposal, BCI will furnish and install three (3) stations. The proposal includes provisions to purchase four (4) additional prepaid years of Charge Point Assure for onsite Parts and Labor and five (5) years of prepaid Commercial Network Plan as well.

Staff asked BCI and Charge Point to add the CT-4000-ASSURE4 warranty coverage which serves to protect the equipment against any possible malfunction for up to 5 years. Charge Point would provide onsite labor and parts, in some cases as fast as 1 business day (some activity can be done remotely and would result in services rendered within an hour of identifying a problem). Staff also chose to include CTSW-SAS-COMM-5 as an add-on. This option will enable users to identify the City's car charging stations using a mobile app. For example, a car owner needing an immediate charge can detect the Pompano Beach stations on his/her phone. The driver will be given step-by-step instructions to find the City's stations and how to use the system. This will have a positive side effect by promoting business and attracting visitors to destination areas in the City. The add-on will also have provisions for future expansion to charge a fee (if desirable), payment processing, reservations, etc. Other valuable information can be found in the Florida Electric Vehicle (EV) Overview document.

This project envisions the installation of three (3) units similar to those recently installed at Whole Foods, which are capable of providing service to most electric cars in the market. In fact, Charge Point is actively co-branding driver kits for the Nissan Leaf, Chevrolet Volt, BMW i3, Toyota Avalon, and Volkswagen e-Golf. Collectively, these manufacturers account for over 60% of the electric vehicles in the marketplace. Staff has chosen stations that will be able to charge Japanese and German cars alike.

Before deciding to proceed, Staff had an opportunity to evaluate Charge Point and compare this manufacturer's products and pricing with those produced by other competitors. Addendum "A" includes details of the firms evaluated including Charge Point.

Staff supports this initiative recommends authorization to retain BCI to proceed.

### **More Information About Electric Cars**

In recent times, multiple car manufacturers have expanded their line up to include plug-in electric vehicles (PEVs). This fuel alternative comes with noticeable environmental benefits such as reduced carbon-based greenhouse gases that heat the atmosphere, causing damaging



climate changes; improved air quality; and relying on secure, domestically-produced and more environmentally-friendly electricity, especially non-polluting and renewable energy resources. According to the Electric Power Research Institute (EPRI) a PEV hybrid vehicle with a modest 20-mile electric range could save 300 gallons of gasoline, avoiding 6000 pounds of damaging greenhouse gas emissions and reducing pollution by 38 percent. A report published by the National Resources Defense Council with EPRI found that, if 60 percent of U.S. light vehicles were powered by the electric grid, carbon emissions from the transportation sector would drop by one-third. This is equivalent to taking 82 million conventionally-powered cars – and the pollution they produce – off our roads. EPRI estimated if all American drivers switched to PEVs tomorrow, the U.S. electric grid could support more than three-quarters of cars charging overnight without building a single, new coal-fired plant. The benefits of PEVs are magnified when they draw upon new, clean, renewable energy sources, such as electricity generated by hydro-electric, wind or solar power. PEVs will become even more environmentally-friendly as renewable energy is added to the electric grid over time.

## Atlantic Boulevard Bridge Summary - 2/2/16

Item	Initial Costs 10/25/2103	30% 3/3/2015	60% 6/4/2015	95% GMP 1/29/2016
1.0 DEMOLITION & RELOCATE JERSEY & REPLACE W/ WYOMING BARRIER	\$508,944.00	\$780,500.00	\$780,500.00	\$767,685.00
2.0 TENDER HOUSE ENHANCEMENTS	\$221,200.00	\$232,053.00	\$259,753.50	\$270,850.00
3.0 REPLACEMENT OF BRIDGE LIGHTS	scope not incl. at that time	\$160,000.00	\$135,850.00	\$125,000.00
4.0 SAILS INCLUDING WALKWAY TO A PLAZA ON THE SW CORNER OF BRIDGE	\$1,500,000.00	\$1,301,182.00	\$1,503,581.52	\$1,581,820.00
5.0 COMPUTER OPERATED LIGHTING OF SAILS	\$126,400.00	\$81,900.00	\$81,900.00	\$75,865.00
6.0 ESPLANADE / PROMENADE	\$872,160.00	\$882,042.00	\$1,015,472.96	\$969,220.00
7.0 MOUNTABLE GRAPHICS	\$347,600.00	\$325,552.00	\$325,552.00	\$405,000.00
8.0 BACKLIGHTING OF TENDER HOUSE & ARTISTIC SCREEN, BASCULE SPAN & CAST CONC. PANEL FOR UNDER BRIDGE BOARDWALK	\$205,400.00	\$92,138.00	\$64,837.50	\$283,420.00
<b>SUBTOTAL</b>	\$3,781,704.00	\$3,855,367.00	\$4,167,447.48	\$4,478,860.00
CONTINGENCY	\$756,340.80	\$578,305.05	\$500,093.70	\$175,000.00
<b>TOTAL</b>	<b>\$4,538,044.80</b>	<b>\$4,433,672.05</b>	<b>\$4,667,541.18</b>	<b>\$4,653,860.00</b>

Notes:



RESOLUTION NO. \_\_\_\_\_

**POMPANO BEACH COMMUNITY REDEVELOPMENT AGENCY**

**A RESOLUTION OF THE POMPANO BEACH COMMUNITY REDEVELOPMENT AGENCY APPROVING AND AUTHORIZING THE PROPER OFFICIALS TO ISSUE A PURCHASE ORDER TO BURKHARDT CONSTRUCTION INC. IN THE AMOUNT OF \$72,160 FOR INSTALLATION, WARRANTY AND MAINTENANCE OF ELECTRIC CAR CHARGING STATIONS; PROVIDING AN EFFECTIVE DATE.**

**WHEREAS**, on April 28, 2010, the CRA issued a request for proposals for a construction manager at risk for contract services relating to various streetscape and roadway improvements in the East CRA; and

**WHEREAS**, Burkhardt Construction, Inc. (BCI) was the successful proposer and by Resolution No. 2011-74, the CRA approved a contract with BCI with a guaranteed maximum price of \$11,025,210.79; and

**WHEREAS**, included in the contract scope were electric car charging stations, which due to funding and project priorities, were removed from the contract scope by Resolution No. 2011-73; and

**WHEREAS**, funds are now available to install the electric car charging stations and it is in the best public interest for BCI, as the original contractor, to complete the work.

**NOW, THEREFORE, BE IT RESOLVED BY THE POMPANO BEACH COMMUNITY REDEVELOPMENT AGENCY THAT:**

**SECTION 1.** The proper officials are authorized to issue a purchase order to Burkhardt Construction, Inc. in the amount of \$72,160 for installation, warranty and maintenance of electric car charging stations.

**SECTION 2.** This Resolution shall become effective upon passage.

**PASSED AND ADOPTED** this \_\_\_\_\_ day of February, 2016.

\_\_\_\_\_  
**LAMAR FISHER, CHAIRPERSON**

**ATTEST:**

\_\_\_\_\_  
**MARGARET GALLAGHER, SECRETARY**



NE 26 Ave

NE 1 St

NE-1st-St

NE 27th Ave

Cafe Maxx

NE 27 Ave

The Foundry

NE 28 Ave

1-Double Port Unit

Harbor Village Shoppes

Atlantic Blvd

E-Atlantic-Bldv

E-28th-Ave

Google earth

© 2015 Google



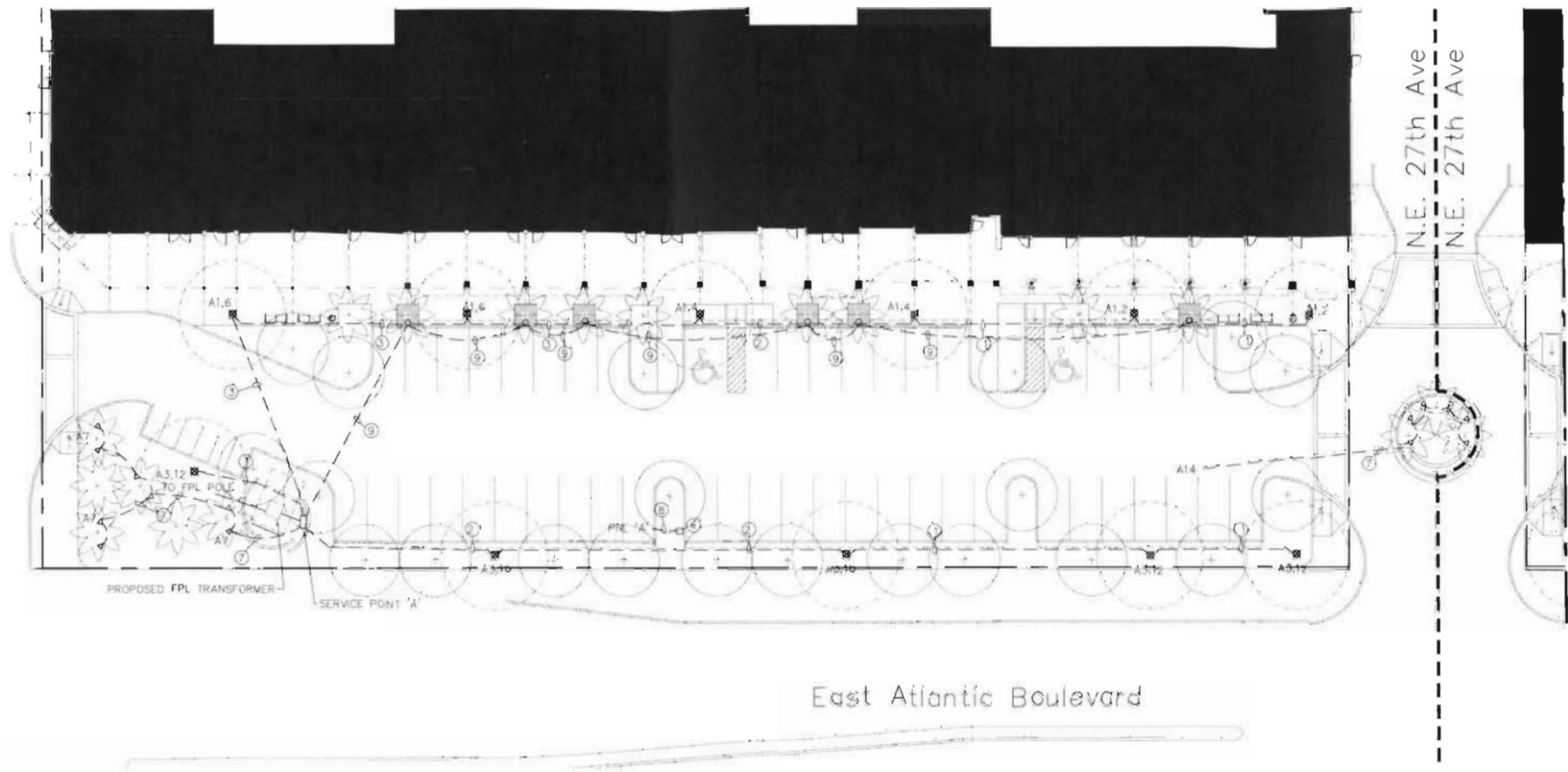
**ELECTRICAL KEY NOTES**

- ① 1" 2#8, 1#8EG LIGHTING 2#8 RECEPTACLE
- ② 1" 2#8, 1#8EG LIGHTING #8 RECEPTACLE
- ③ 1" 2#8, 1#8EG LIGHTING
- ④ ELECTRIC CAR CHARGING STATION VERIFY EXACT LOCATION AND REQUIREMENTS OF CHARGING STATION AND ADJUST AS NECESSARY
- ⑤ SERVICE PANEL SEE SHEET E-3.0 FOR RISER AND PANEL INFORMATION
- ⑥ 1" 2#8, 1#8EG
- ⑦ 1" 2#8, 1#8EG
- ⑧ 1" 2#8, 1#8EG
- ⑨ 1" 2#8, 1#8EG

**GENERAL NOTES**

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH ALL LOCAL UTILITIES AND TO MEET ALL OF THEIR INSTALLATION REQUIREMENTS. ALL LABOR, EQUIPMENT OR MATERIALS NECESSARY TO MEET THESE REQUIREMENTS IS TO BE INCLUDED IN THE PROPOSAL. THE CONTRACTOR SHALL OBTAIN, DELIVER AND INSTALL ALL CONDUITS, PULL-BOXES AND EQUIPMENT AS REQUIRED BY THE UTILITIES TO THEIR SPECIFICATIONS.
2. THE INSTALLATION SHALL MEET ALL REQUIREMENTS OF THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) AND ALL CODES HAVING JURISDICTION.
3. AN EQUIPMENT GROUND WIRE SIZED PER THE NEC SHALL BE PULLED IN ALL ELECTRICAL CONDUITS, POWER & CONTROL, WHETHER OR NOT INDICATED ON THE PLANS.
4. ALL EQUIPMENT AND MATERIALS SHALL BE NEW AND UNUSED AND U.L. LISTED.
5. ALL EQUIPMENT FURNISHED AND INSTALLED BY THE CONTRACTOR SHALL BE GUARANTEED AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE UNLESS OTHERWISE SPECIFIED.
6. COORDINATE ALL EQUIPMENT LOCATIONS WITH THE ENGINEER AND LANDSCAPE CONTRACTOR BEFORE ANY INSTALLATION. ALL EQUIPMENT DIMENSIONS AND CONDUIT SIZES SHALL BE VERIFIED WITH THE MANUFACTURER'S APPROVED SHOP DRAWINGS PRIOR TO FORMING CONCRETE WORK.
7. THE DRAWINGS ARE NOT INTENDED TO SHOW THE EXACT LOCATION OF CONDUIT RUNS. THESE ARE TO BE COORDINATED WITH THE OTHER TRADES SO THAT CONFLICTS ARE AVOIDED.

N.E. 26th Ave

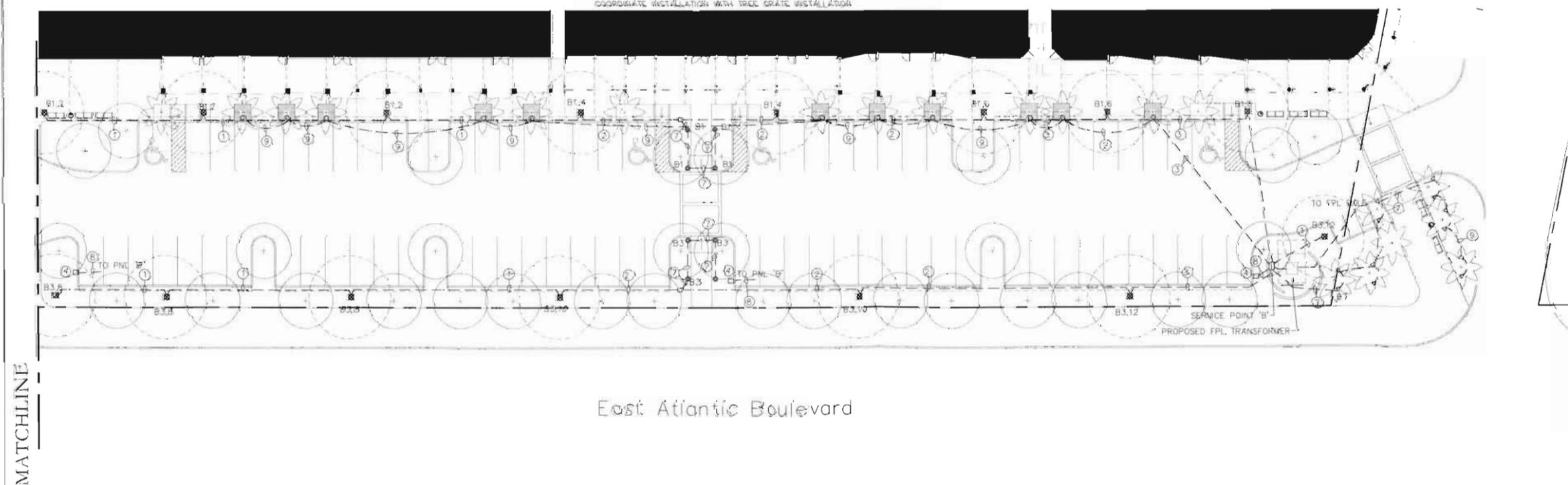


1 Site Lighting Electrical Plan  
E-2.0 SCALE: 1/16" = 1'-0"

Figure "2"

**LEGEND**

- ⊗ SINGLE SITE LIGHTING FIXTURE - SEE DETAIL ON SHEET E-1.0
- ⊕ BOLLARD WALKWAY LIGHTING FIXTURE - SEE DETAIL ON SHEET E-1.0
- ⊙ LANDSCAPE LIGHTING FIXTURE TYPE 'A' - SEE DETAIL ON E-3.1
- FUTURE FLUSH MOUNTED IN TREE GRATE LANDSCAPE LIGHT (TOTAL QTY OF 17) - SYSTEMALUX CAT. #1231-3W00-30-19, 120V LED, WHITE 6000K. COORDINATE INSTALLATION WITH TREE GRATE INSTALLATION.



2 Site Lighting Photometric Plan  
E-2.0 SCALE: 1/16" = 1'-0"

**ba**  
BERMELLO AJAMIL & PARTNERS, INC  
Architectural • Engineering • Planning  
Interior Design • Landscape Architecture  
8801 South Bayshore Drive, 10th Floor  
Miami, Florida 33133  
(305) 859-2050  
Fax (305) 860-3700

Smith Engineering Consultants, Inc.  
1161 Palm Beach Lakes Blvd., Suite 312  
West Palm Beach, FL 33409  
(561) 816-3911 Fax (561) 616-3912  
State P.E. # 8228

PREPARED FOR:  
**CRA**  
POMPAHO BEACH  
CITY OF POMPAHO BEACH  
COMMUNITY  
REDEVELOPMENT  
AGENCY  
(CRA)

LARRY M. SMITH  
PROFESSIONAL ENGINEER  
FLORIDA P.E. NO. 45997

**PERMIT  
SUBMISSION**

Revisions:


PROJECT NAME:  
**Harbor Village  
Improvements  
Master Plan**

PROJECT ADDRESS:  
Atlantic Blvd. Harbor Dr. to N.E. 26th Ave.  
Pompano Beach, Florida



PROJECT NO.:  
SCALE:  
DATE: December 16, 2010  
DRAWN:  
CHECKED:  
CADD FILE:  
DRAWING TITLE:  
**SITE LIGHTING  
PHOTOMETRIC  
PLAN**  
SHEET NO.:  
**E-2.0**

Project Name:  
**POMPANO BEACH BOULEVARD STREETSCAPE**



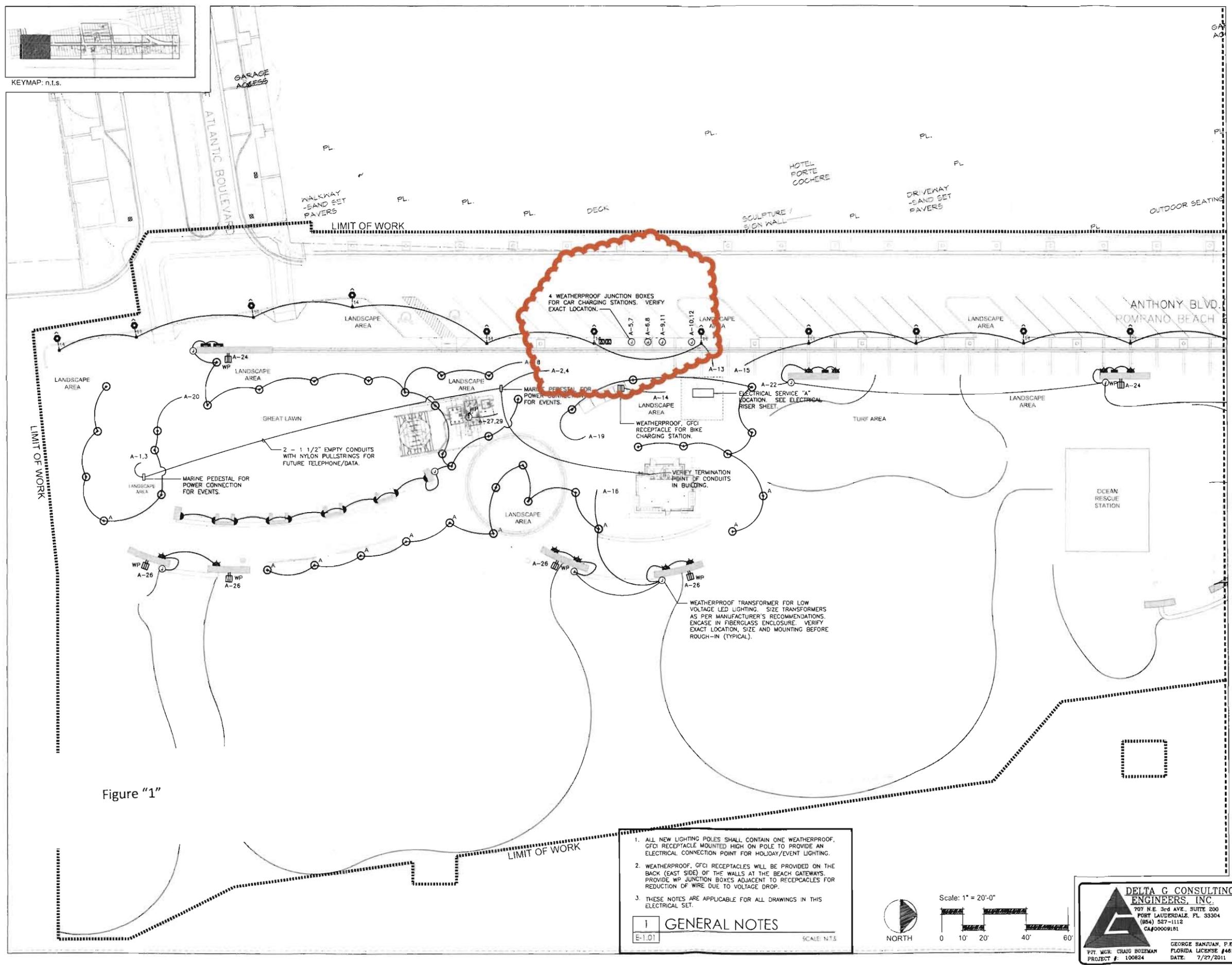
- Consultants:
- EDSA**  
 Planning, Landscape Architecture, Urban Design  
 1512 East Broward Boulevard  
 Suite 110  
 Fort Lauderdale, FL 33301
  - KEITH & ASSOCIATES, INC.**  
 Civil Engineering & Surveying  
 301 East Atlantic Blvd  
 Pompano Beach, FL 33060
  - COASTAL PLANNING & ENGINEERING, INC.**  
 Environmental / DEP Permitting  
 2481 N.W. Boca Raton Blvd.  
 Boca Raton, FL 33431
  - DELTA G CONSULTING ENGINEERS**  
 Electrical Engineering  
 707 NE 3rd Ave., #200  
 Fort Lauderdale, FL 33304
  - BERMELLO AJAMIL AND PARTNERS, INC.**  
 Architecture & Structural Engineering  
 2601 South Bayshore Drive 10th Floor  
 Miami, FL 33133
  - SWEENEY + ASSOCIATES**  
 Irrigation Design & Consulting  
 38730 Sky Canyon Drive, Suite C  
 Murrieta, California 92563
  - TRC WORLDWIDE ENGINEERS, INC.**  
 Structural Engineering  
 3590 NW 56th Street  
 Fort Lauderdale, FL 33309
  - REYNOLDS, SMITH AND HILL, INC.**  
 Traffic Engineer  
 3125 W Commercial Blvd, Suite 130  
 Ft. Lauderdale, FL 33309
  - CONSTRUCTION MANAGEMENT SERVICES (CMS)**  
 Estimating  
 10 Fairway Drive Suite 301  
 Deerfield Beach, FL 33441
  - TESTING LAB OF THE PALM BEACHES**  
 Geo-Technical Engineer  
 421 South H Street  
 Lake Worth, FL 33460

Rev:	Date:	Description:	By:
△			
△			
△			
△			

Sheet Title:  
**ELECTRICAL LAYOUT PLAN**  
 ISSUE FOR CONSTRUCTION

Date:	10.7.11	Scale:	AS NOTED
Drawn By:	CB	Designed By:	EDSA
Approved By:	GSJ	Project No.:	110086

Sheet Number:  
**E2-1.01**



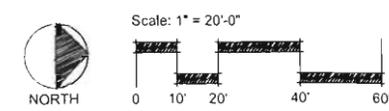
KEYMAP: n.t.s.

MATCHLINE 1 - (SEE SHEET E2-1.02)

Figure "1"

- ALL NEW LIGHTING POLES SHALL CONTAIN ONE WEATHERPROOF, GFCI RECEPTACLE MOUNTED HIGH ON POLE TO PROVIDE AN ELECTRICAL CONNECTION POINT FOR HOLIDAY/EVENT LIGHTING.
- WEATHERPROOF, GFCI RECEPTACLES WILL BE PROVIDED ON THE BACK (EAST SIDE) OF THE WALLS AT THE BEACH GATEWAYS. PROVIDE WP JUNCTION BOXES ADJACENT TO RECEPTACLES FOR REDUCTION OF WIRE DUE TO VOLTAGE DROP.
- THESE NOTES ARE APPLICABLE FOR ALL DRAWINGS IN THIS ELECTRICAL SET.

**1 GENERAL NOTES**  
 E-1.01 SCALE: N.T.S.



**DELTA G CONSULTING ENGINEERS, INC.**  
 707 N.E. 3rd AVE., SUITE 200  
 FORT LAUDERDALE, FL 33304  
 (954) 527-1112  
 CA#00009181

PREPARED BY: CRAIG ROZEMAN  
 PROJECT #: 100824

DESIGNED BY: GEORGE SAMUHAN, P.E.  
 FLORIDA LICENSE #46100  
 DATE: 7/27/2011



**EXHIBIT A - PROPOSAL**

**City of Pompano Beach**

**Proposal to: Furnish and Install Car Charging Stations at Pompano Bch Blvd. and Harbor Village**

**From:** Burkhardt Construction, Inc.  
1400 Alabama Ave., Suite #20  
West Palm Beach, FL 33401  
Tel: (561) 659-1400  
Fax: (561) 659-1402

**Owner:** City of Pompano Beach  
Attn: Horacio Danovich  
100 W. Atlantic Blvd., Suite 276  
Pompano Beach, FL 33060  
Tel: (954) 786-7834

**Designer:** N/A

**Plans:** N/A

**Project:** Furnish and Install Car Charging Stations at Pompano Beach Blvd. and Harbor Village

**Date:** 12/1/2015; REV. 1/7/16

Item Description	Quantity	U/M	Unit Price	Amount
<b>Car Charging Stations</b>				<b>\$ 72,160.00</b>
Furnish and Install 3 ChargePoint car charging stations. See attached sample station.	3	EA	\$24,053.33	\$ 72,160.00

**TOTAL \$ 72,160.00**

**EXCLUSIONS AND CLARIFICATIONS**

Price includes furnishing and installation of charging station, wiring and 60 amp breaker complete.

Price based on pre-existing service panel and conduit already installed prior to mobilization.

Concrete pedestal included.

Restoration included.

Each site will be permitted. Plans and permit fees included.

Internet communication, wireless communication, network connections by others.

At Pompano Beach Blvd. 2ea single output car charging units to be installed.

At Harbor Vilage Parking Lot, 1ea dual output car charging unit to be installed.

Price includes Product Line Items CT 4000-ASSURE4 and CTSW-SAS-COMM-5 (5 year coverage) in Charge Point Quote dated 11/18/15 (Exhibit E).

# CT4000 Level 2 Commercial Charging Stations

## Specifications and Ordering Information

### Ordering Information

Specify model number followed by the applicable code(s).  
The order code sequence is: **Model-Options. Warranty and Misc** are ordered as a separate line item.

Description	Order Code
Model	
6' Single Port Bollard Mount	CT4011
6' Dual Port Bollard Mount	CT4021
6' Single Port Wall Mount	CT4013
6' Dual Port Wall Mount	CT4023
8' Dual Port Bollard Mount	CT4025
8' Dual Port Wall Mount	CT4027
Options	
Integral Gateway Modem - USA	-GW1
Integral Gateway Modem - Canada	-GW2
Misc	
Power Management Kit	CT4000-PMGMT
Bollard Concrete Mounting Kit	CT4001-CCM
Warranty	
ChargePoint Assure	CT4000-ASSURE $n$ *

\*Substitute  $n$  for the duration of the additional coverage (1, 2, 3, or 4 years)

### Order Code Examples

If ordering this	the order code is
Dual Port Bollard Mount USA Gateway Station with Concrete Mounting Kit	CT4021-GW1 CT4001-CCM
Single Port Wall Mount Station with 4 Additional Years of Assure Coverage	CT4013 CT4000-ASSURE4
Dual Port Wall Mount Canada Gateway Station with 2 Additional Years of Assure Coverage	CT4023-GW2 CT4000-ASSURE2

Note: All CT4000 stations come with 1 year of ChargePoint Assure coverage at no charge.

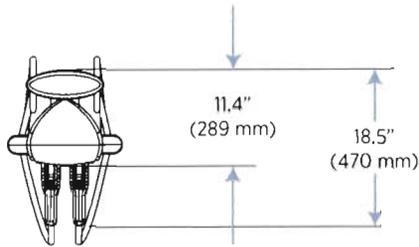
### Recommended Companion Products

Description	Order Code
ChargePoint Commercial Service Plan, 3-year Subscription	CTSW-SAS-COMM-3
Station Initial Activation	CPSUPPORT-ACTIVE
Station Management Service, 3-year Subscription	CPSUPPORT-MGMT3

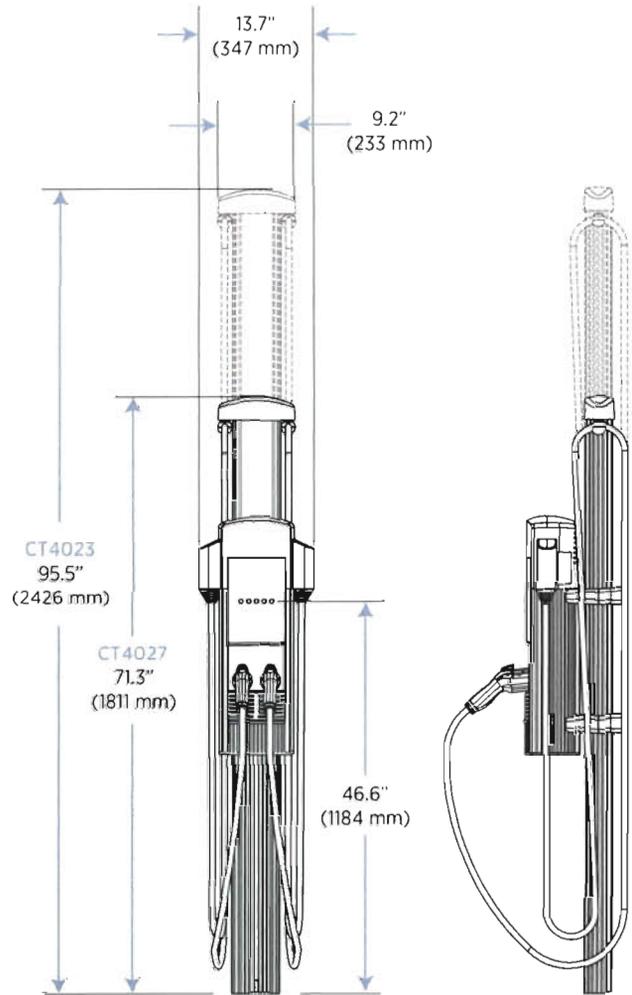
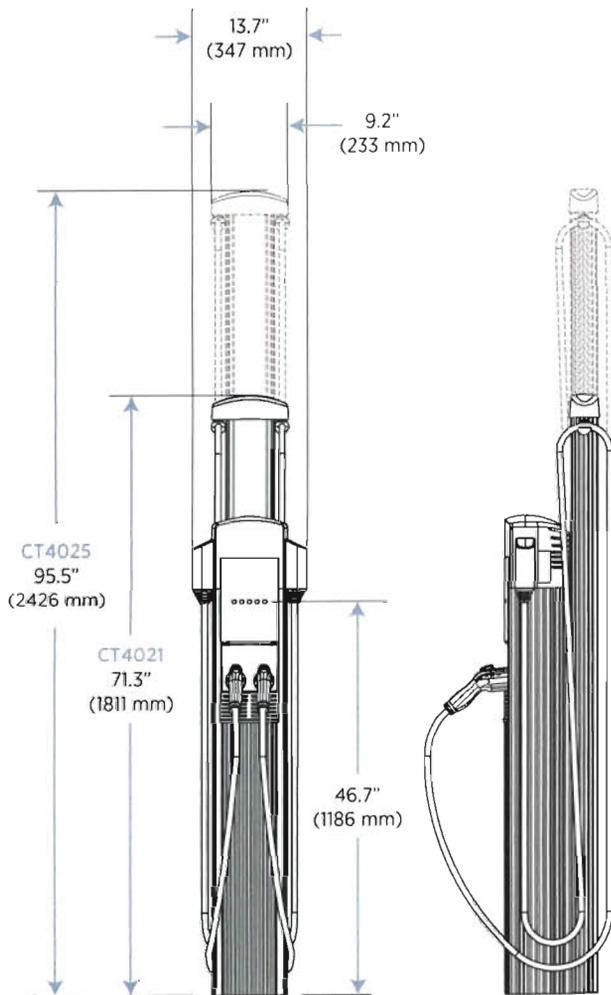
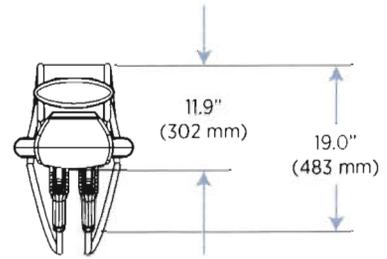


CT4021 bollard station with 6' cable management

### CT4021 (6') and CT4025 (8') Bollard



### CT4023 (6') and CT4027 (8') Wall Mount



## CT4000 Family Specifications

Electrical Input	Single Port (AC Voltage 208/240VAC)			Dual Port (AC Voltage 208/240VAC)		
	Input Current	Input Power Connection	Required Service Panel Breaker	Input Current	Input Power Connection	Required Service Panel Breaker
Standard	30A	One 40A branch circuit	40A dual pole (non-GFCI type)	30A x 2	Two independent 40A branch circuits	40A dual pole (non-GFCI type) x 2
Standard Power Share	n/a	n/a	n/a	32A	One 40A branch circuit	40A dual pole (non-GFCI type)
Power Select 24A	24A	One 30A branch circuit	30A dual pole (non-GFCI type)	24A x 2	Two independent 30A branch circuits	30A dual pole (non-GFCI type) x 2
Power Select 24A Power Share	n/a	n/a	n/a	24A	One 30A branch circuit	30A dual pole (non-GFCI type)
Power Select 16A	16A	One 20A branch circuit	20A dual pole (non-GFCI type)	16A x 2	Two independent 20A branch circuits	20A dual pole (non-GFCI type) x 2
Power Select 16A Power Share	n/a	n/a	n/a	16A	One 20A branch circuit	20A dual pole (non-GFCI type)
Service Panel GFCI	Do not provide external GFCI as it may conflict with internal GFCI (CCID)					
Wiring - Standard	3-wire (L1, L2, Earth)			5-wire (L1, L1, L2, L2, Earth)		
Wiring - Power Share	n/a			3-wire (L1, L2, Earth)		
Station Power	8W typical (standby), 15W maximum (operation)					

## Electrical Output

Standard	7.2kW (240VAC @ 30A)	7.2kW (240VAC@30A) x 2
Standard Power Share	n/a	7.2kW (240VAC@30A) x 1 or 3.8kW (240VAC@16A) x 2
Power Select 24A	5.8kW (240VAC@24A)	5.8kW (240VAC@24A) x 2
Power Select 24A Power Share	n/a	5.8kW (240VAC@24A) x 1 or 2.9kW (240VAC@12A) x 2
Power Select 16A	3.8kW (240VAC@16A)	3.8kW (240VAC@16A) x 2
Power Select 24A Power Share	n/a	3.8kW (240VAC@16A) x 1 or 1.9kW (240VAC@8A) x 2

## Functional Interfaces

Connector(s) Type	SAE J1772™	SAE J1772™ x 2
Cable Length - 6' Cable Management	18' (5.5 meters)	18' (5.5 meters) x 2
Cable Length - 8' Cable Management	n/a	23' (7 meters)
Overhead Cable Management System	Yes	
LCD Display	5.7" full color, 640x480, 30fps full motion video, active matrix, UV protected	
Card Reader	ISO 15693, ISO 14443, NFC	
Locking Holster	Yes	Yes x 2

## Safety and Connectivity Features

Ground Fault Detection	20mA CCID with auto retry
Open Safety Ground Detection	Continuously monitors presence of safety (green wire) ground connection
Plug-Out Detection	Power terminated per SAE J1772™ specifications
Power Measurement Accuracy	+/- 2% from 2% to full scale (32A)
Power Report/Store Interval	15 minute, aligned to hour
Local Area Network	2.4 GHz Wi-Fi (802.11 b/g/n)
Wide Area Network	3G GSM, 3G CDMA

## Safety and Operational Ratings

Enclosure Rating	Type 3R per UL 50E
Safety Compliance	UL listed for USA and cUL certified for Canada; complies with UL 2594, UL 2231-1, UL 2231-2, and NEC Article 625
Surge Protection	6kV @ 3000A. In geographic areas subject to frequent thunder storms, supplemental surge protection at the service panel is recommended.
EMC Compliance	FCC Part 15 Class A
Operating Temperature	-22°F to 122°F (-30°C to +50°C)
Storage Temperature	-22°F to 140°F (-30°C to +60°C)
Non-Operating Temperature	-40°F to 140°F (-40°C to +60°C)
Operating Humidity	Up to 85% @ 122°F (+50°C) non-condensing
Non-Operating Humidity	Up to 95% @ 122°F (+50°C) non-condensing
Terminal Block Temperature Rating	221°F (105°C)
Maximum Charging Stations per 802.11 Radio Group	10. Each station must be located within 150 feet "line of sight" of a gateway station.

ChargePoint, Inc. reserves the right to alter product offerings and specifications at any time without notice, and is not responsible for typographical or graphical errors that may appear in this document.

## Contact Us

To order your CT4000 charging station:

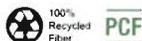
-  Call +1.408.841.4500 or +1.877.370.3802 (US toll free)
-  Email [sales@chargepoint.com](mailto:sales@chargepoint.com)



ChargePoint, Inc.  
254 East Hacienda Avenue | Campbell, CA | 95008-6617 USA  
+1.408.841.4500 or toll free +1.877.370.3802  
[chargepoint.com](http://chargepoint.com)

Copyright © 2015 ChargePoint, Inc. All rights reserved. CHARGEPOINT is a U.S. registered trademark/service mark, and an EU registered logo mark of ChargePoint, Inc. All other products or services mentioned are the trademarks, service marks, registered trademarks or registered service marks of their respective owners. DS-CT4000-01. April 2015. PN 73-001020-01-7.

Printed on paper made with 100% post-consumer fiber and 100% certified renewable energy, and processed chlorine free.



Listed by Underwriters Laboratories Inc. 

EXHIBIT C - SINGLE OUTPUT UNIT

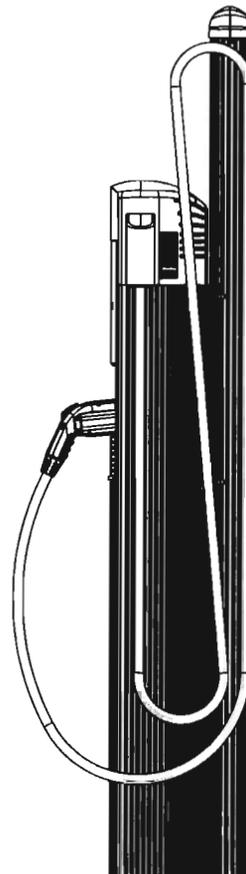
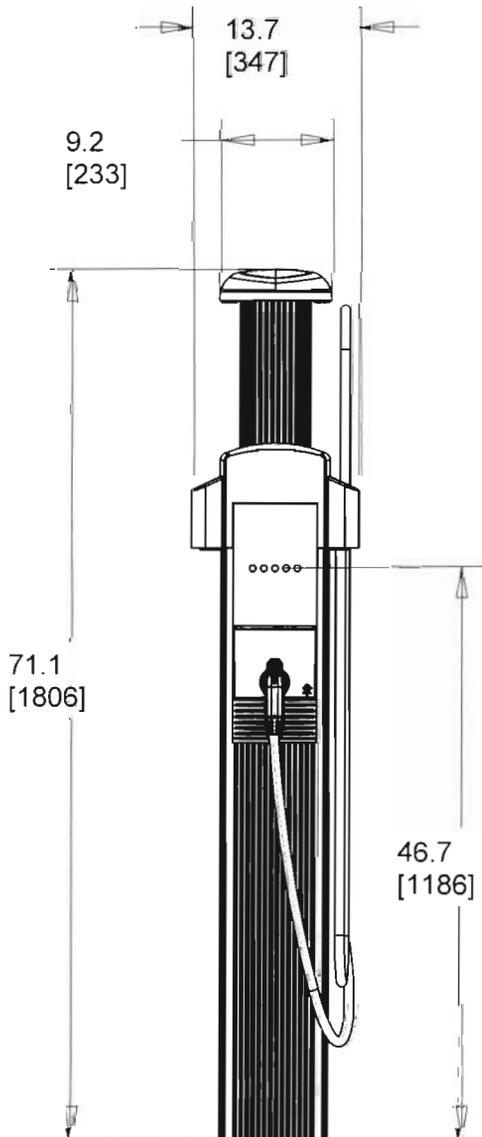
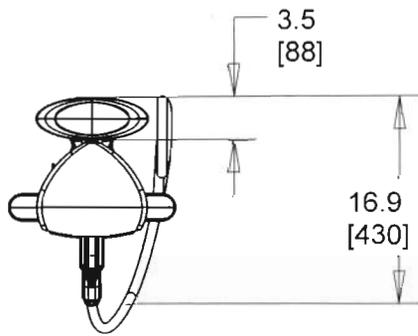
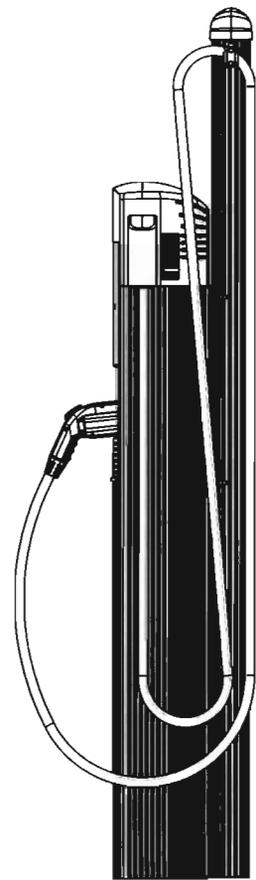
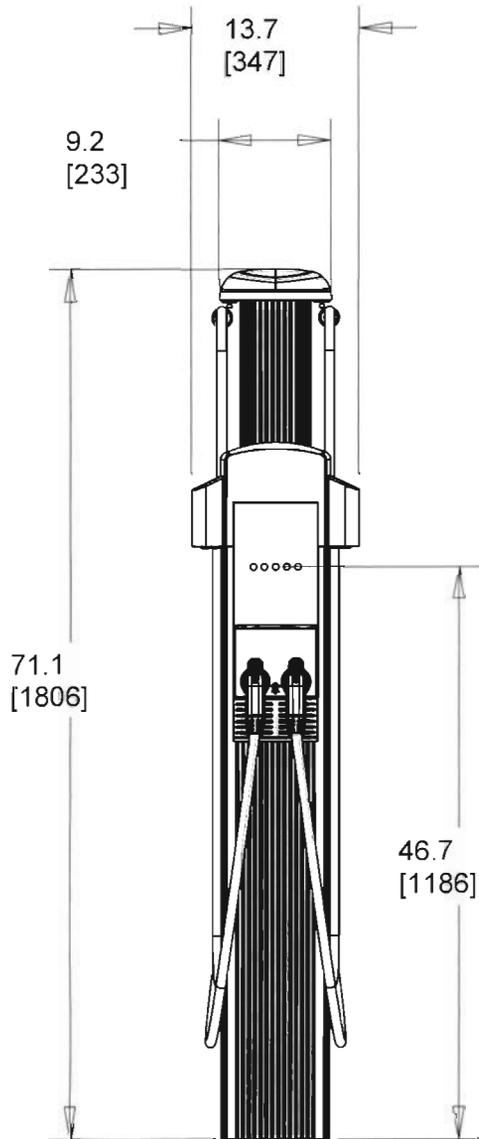
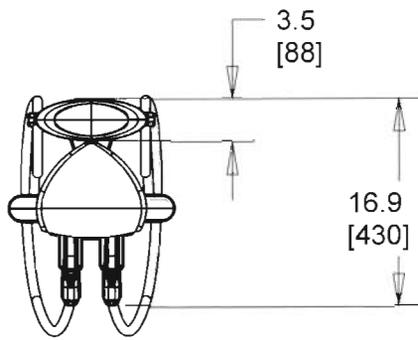


EXHIBIT D - DOUBLE OUTPUT UNIT



# EXHIBIT E - ADDITIONAL SERVICE PROPOSAL



Quote Number 00102419 Created Date 11/18/2015  
 Expiration Date 12/18/2015  
 Prepared By Jody McDevitt Phone (561) 659-1400  
 Email jody.mcdevitt@chargepoint.com Email marc@burkhardtconstruction.com

Contact Information \*\*Please verify that Billing & Shipping details are accurate

Contact Name Marc Kleisley Ship To Name City of Pompano Beach  
 Bill To Name City of Pompano Beach  
 Bill To 1201 NE 5th Ave.  
 Pompano Beach, FL 33060  
 USA



Quoted Line Items

By brandon at 3:48:54 PM, 11/18/2015

Product Quoted	Product Description	Sales Price	Quantity	Total Price
CT4021-GW1	Dual Output Gateway Option USA, Bollard Unit - 208/240V @30A with Cord Management	\$7,210.00	1.00	\$7,210.00
CT4011-GW1	Single Output Gateway Option USA, Bollard Unit - 208/240V @30A with Cord Management	\$5,010.00	1.00	\$5,010.00
CT4011	Single Output, Bollard Unit - 208/240V @30A with Cord Management	\$4,495.00	1.00	\$4,495.00
CT4000-ASSURE	Initial 1 year of ChargePoint Assure for the CT4000. Parts and On-Site Labor to repair or replace any manufacturing defect. Includes remote monitoring of station and proactive repair dispatch. A successful Site Validation is required to activate the initial ChargePoint Assure coverage if site prep and station install are not performed by a ChargePoint National O&M Partner.	\$0.00	3.00	\$0.00
CT4000-ASSURE4	4 additional prepaid years of ChargePoint Assure for the CT4000 at \$645 per year, per station. Free site validation and activation with purchase of 4 year prepaid plan. Parts and On-Site Labor to repair or replace any manufacturing defect. Includes station management, remote monitoring of station and proactive repair dispatch. A successful Site Validation is required to activate any ChargePoint Assure product.	\$2,580.00	3.00	\$7,740.00
CTSW-SAS-COMM-5	5 Year Pre-Paid Commercial Network Service Plan. Designed for employers, businesses and the government, this plan includes 24x7x365 driver support, access control, general reporting, OTA upgrades, payment processing, flexible pricing policies, reservations and more.	\$1,105.00	4.00	\$4,420.00
CPSUPPORT-ACTIVE	Station Activation & Configuration Service. Activate ChargePoint Service Plans. Activate ChargePoint Warranties. Configure Radio Groups. Configure Custom Groups. Configure Connections. Configure Access Control. Configure Visibility Control. Configure Pricing. Configure Reports and Alerts.	\$0.00	3.00	\$0.00
CT4000-SITEVALID	On-Site Validation of electrical capacity, transformers, panels, breakers, wiring, cellular coverage and that station installation meets all ChargePoint published requirements. Note that a failed Site Validation will incur a second validation fee to repeat the validation after the site deficiencies are corrected. Site is defined as a group of stations all connected to the same electrical panel. Site Validation is not required when installation was performed by a ChargePoint national Operations and Maintenance (O&M) Partner or a Channel Partner that has qualified to self-certify.	\$0.00	2.00	\$0.00

Totals

RECEIVED



By brandon at 3:48:58 PM, 11/18/2015

Subtotal \$28,875.00
Grand Total \$28,875.00

Note: Shipping fees and sales tax (in applicable states) will be applied to this quote at time of invoicing.

CT4000 ChargePoint Assure Maintenance Options

Parts and On-Site Labor to repair or replace any manufacturing defect. Includes remote monitoring of station and proactive repair dispatch. A successful Site Validation is required to activate the initial ChargePoint Assure coverage if site prep and station install are not performed by a ChargePoint National O&M Partner. Choose a prepaid plan or a committed annual billing plan below.

PREPAID PLANS

For up to a total of five prepaid years of ChargePoint Assure.

COMMIT PLANS

For up to a total of five committed years of ChargePoint Assure for the CT4000 billed per year, per station. Annual billing occurs after the first initial year of Assure maintenance.

- 4 additional prepaid years for \$645 per year, per station
3 additional prepaid years for \$688 per year, per station
2 additional prepaid years for \$705 per year, per station
1 additional prepaid year for \$740 per year, per station

- 4 additional years billed at \$757 per year, per station
3 additional years billed at \$774 per year, per station
2 additional years billed at \$791 per year, per station
1 additional year billed at \$817 per year, per station

No plan selected

Initial and Date Below

Network Service Plan Options

Prepaid Commercial Network Plan

Designed for employers, businesses and the government, this plan includes 24x7x365 driver support, access control, general reporting, OTA upgrades, payment processing, flexible pricing policies, reservations and more.

- 5 prepaid years for \$221 per year, per port \*
4 prepaid years for \$227.50 per year, per port \*\*
3 prepaid years for \$235 per year, per port
2 prepaid years for \$250 per year, per port
1 prepaid year for \$280 per year, per port

\* Can only be combined with ASSURE4
\*\* Can only be combined with ASSURE3

Prepaid Service Provider Network Plan

Designed for Utilities and EVSPs, this plan includes everything provided in both corporate and commercial service plans plus: white-label branded driver website, load management and driver analytics.

- 5 prepaid years for \$570 per year, per port
4 prepaid years for \$583.75 per year, per port
3 prepaid years for \$605 per year, per port
2 prepaid years for \$642.50 per year, per port
1 prepaid year for \$715 per year, per port

\* Can only be combined with ASSURE4
\*\* Can only be combined with ASSURE3

DC Fast pricing is the twice the price of Level2 AC service plan pricing. NOTE: dual nozzle, sequential charging only requires one Service Plan.

Quote Acceptance

- All pricing is confidential between Customer and ChargePoint.
- All prices are Fob Source.
- Customer to be invoiced at time of shipment.
- All invoices are Net 30 days. Credit checks are required for new customers.
- Pricing does not include installation or mounting services. These can be quoted separately.
- Additional Purchase Terms and Conditions can be found at <http://www.chargepoint.com/termsandconditions>

By signing this quote I hereby acknowledge that I have the authority to purchase the product detailed on this document on behalf of my organization. Furthermore, I agree to the above terms and conditions and that this signed quote shall act as a purchase order.

Accepted by:

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**RECEIVED**



By **brandon** at 3:49:01 PM, 11/18/2015

Delivery: \_\_\_\_\_  
(Date or ASAP Required)

Why ChargePoint?

- Over 22,300 charging points deployed across the US and Canada
- Over 150,000 drivers carry ChargePoint cards, significantly more than any other charging station provider
- Make the real-time status of your stations visible to EV drivers on EV charging maps
- Drivers can find stations through their mobile phones or other smart devices and get turn-by-turn directions
- ChargePoint is embedded into in-dash navigation systems of major auto OEMs
- Services delivered from the cloud so your IT Group is not required
- 24 x 7 x 365 driver support available via 800 number (live, not automated)
- 24 x 7 x 365 monitoring of the ChargePoint network by ChargePoint. We can find problems and resolve them before your customers
- 13 x 5 station owner support available. 8AM EST to 6PM PST. No other supplier provides this level of support
- Centrally manage all stations through a secure online portal. Change pricing on all or some stations. Change greeting messages. Provide access control
- Track and report on station utilization, energy costs, and greenhouse gas savings
- Create different groups and assign each group their own pricing, access, etc. (e.g. employees vs. visitors)
- Create customer loyalty programs through ChargePoint Connections (included with Commercial Network Software)
- Stations accept ChargePoint cards, credit cards, and direct access through smart phones. Very flexible pricing scenarios available
- Free software upgrades with software subscription. Stations are always up-to-date thanks to over-the-air software updates
- The most complete EV charging solution in the industry
- The most comprehensive Parts and Dispatch Labor warranty in the industry with Assure Warranty and Post Warranty Maintenance plans
- Guaranteed Uptime and service response time with Assure Warranty and Post Warranty Maintenance plans
- Proactive station monitoring and dispatch to ensure maximum uptime and usability
- Monthly summary and quarterly detailed station performance metrics reports with Assure coverage delivered to you
- Vandalism and Accident labor repair costs coverage with Assure warranty and post warranty maintenance plans

**RECEIVED**

BURKHARDT  
CONSTRUCTION, INC.

*By brandon at 3:49:04 PM, 11/18/2015*

## **ADDENDUM “A”**

### **AEROVIRONMENT**

Background: Aerovirement, known as AV, is a pioneer in the development of electric vehicle charging technologies. The company sells a range of Level 2 and Quick Charge equipment, but also operates its own network of chargers. Price of desirable unit: \$6,480.00 (not including installation, structural elements, permits, etc.).

Approximate Number of Sites: 60

Coverage: AV’s chargers, many of which are DC Quick Chargers, are primarily located in Oregon, and to a lesser extent, in Washington State—as part of the “West Coast Electric Highway.” AV also has a handful of charging locations in Hawaii.

Access: Unlimited monthly access is provided for \$19.99 per month. Subscribing to the AV network starts with calling 888-833-2148 or filling out a form on AV’s website. The company will send a key fob that activates the chargers. If you are a current subscriber there is no activation fee. If you are a new subscriber, there will be a one-time activation fee of \$15.

Cost per charge: As an alternative to the flat monthly access fee, there is the option of paying per session: \$7.50/session for DC Fast Charger; and \$4.00/session for a Level 2 charging station. (Per session payment is only available by calling the Customer Service Support Line at 888-833-2148).

Decision: discarded due to coverage (operates primarily along the U.S. West coast and requires monthly subscription).

### **BLINK NETWORK (Operated by CarCharging Group)**

Background: The assets of Blink Network were purchased by CarCharging Group in October 2013. Ecotality had received a \$114.8 million federal stimulus grant to oversee The EV Project. The goal of The EV Project is to deploy 8,300 private and public chargers. There have been several reported problems associated with Blink chargers, and the Blink Network, such as insufficient customer support, and incompatibility of the equipment with certain vehicles. Price of desirable unit: \$2,500.00 plus user fees for individual charge (varies from \$3.00 - \$10.00 per charge) (not including installation, structural elements, permits, etc.).

Approximate Number of Sites: 1,680

Coverage: Blink Network chargers are located in approximately 25 states, with the largest concentration in California, Arizona, Oregon, Texas, Tennessee and Washington.

Access: Start by registering a credit card with a Blink account. There are no required annual or monthly membership fees, or minimum credit card balance. Members who register will

receive an “InCard” and can initiate a charge using the card. Guests can initiate a charge with Blink’s mobile application.

**Cost Per Charge:** In the states that permit kilowatt-hour pricing, fees for Level 2 EV charging stations owned by Blink and operated on the Blink Network range from \$0.39 to \$0.79 per kWh, depending on the state and individual’s membership status. Blink is a proponent of kWh pricing because it is usage-based and EV drivers pay fees based on the actual amount of power consumed during the charging session rather than the amount of time that the car is plugged into the station. Fees for DCFC chargers owned by Blink and operated on the Blink Network in kWh eligible state range from \$0.49 to \$0.69 per kWh, depending on the state and individual’s membership status.

These states currently permit fees by the kilowatt-hour: California, Colorado, Florida, Hawaii, Illinois, Maryland, Minnesota, New York, Oregon, Utah, Virginia, and Washington, as well as the District of Columbia.

In states where pricing by kWh is not permitted, time-based charging fees for Level 2 charging stations owned by Blink and operated on the Blink Network range from \$0.04 to \$0.06 per minute, depending on membership status. Time-based charging fees are rounded up to the nearest 30-second interval. Fees for DCFC chargers owned by Blink and operated on the Blink.

Network in non-kWh eligible states will range from \$6.99 - \$9.99 per session, depending on membership status.

Decision: discarded as firm prefers to install units and charge for use of the stations.

## **CHARGEPOINT**

**Background:** Chargepoint, previously Coulomb Technologies, describes itself as the largest online network of independently owned EV charging stations operating in 14 countries. The company provides a turnkey EV charging solutions for property owners—who can determine the terms for offering charging to EV drivers. Price of desirable unit: \$7,300.00 (not including installation, structural elements, permits, etc.).

**Approximate Number of Sites:** over 25,000.

**Coverage:** While one-quarter of ChargePoint stations are in California, the network is the most widely distributed with at least one station in approximately 43 U.S. states.

**Access:** There is no cost to sign up and receive a ChargePoint card. Your account provides access to all public stations on ChargePoint. Charging stations are activated with the ChargePoint card, or a contactless credit card. The stations can also be activated by calling a toll-free customer service number on the ChargePoint station, or by using the associated mobile app. Account balances automatically replenish when the balance gets low.

Cost Per Charge: Prices are determined by the property owner. Many ChargePoint stations are currently free.

Decision: largest presence in the market across the country. Excellent warranty and support. Recommended.

### **THE ELECTRIC CIRCUIT**

Background: The Electric Circuit is the largest public charging network in Québec. It is a major initiative providing the charging infrastructure required to support the adoption of plug-in electric vehicles in Québec. Since its launch in March 2012, 85 private and institutional partners have joined The Electric Circuit and the network has now some 350 public charging stations in operation. Price of desirable unit: unable to get unit pricing.

Approximate Number of Sites: 223

Coverage: Charging stations are located in near 90 municipalities throughout 15 regions of Québec's province.

Access: There is no cost to sign up and receive an Electric Circuit card. When you first order your Electric Circuit card, you will be charged \$10 (tax included), which will give you four charging sessions at any 240-V station or a 1-hour charge at any fast charge station. You will then be able to add the amount of money to your account as you wish.

Cost per charge: The rate for a 240-V charge is a flat fee of \$2.50 (tax included), no matter how long you use the charging station. As of October 1st, 2014, fast-charging is offered at \$10 per hour and billed by the minute. This rate applies to all existing and future fast-charge stations of the Electric Circuit.

Decision: discarded due to coverage (operates primarily in Canada).

### **EVGO**

Background: eVgo is subsidiary of NRG, a Fortune 300 and S&P 500 company. It's one of the country's largest power generation and retail electricity businesses, with power plants producing about 47,000 megawatts of generation capacity. eVgo is part of NRG's clean energy portfolio, which includes solar, thermal, and carbon capture technology. Price of desirable unit: unable to get unit pricing.

Approximate Number of Stations: Approximately 150, each with Level 2 and DC quick charging options.

Coverage: Currently, eVgo operates stations in Texas, in the Houston and Dallas-Fort Worth markets, as well as Tennessee, California and the greater Washington, DC area.

Access: NRG's network is only available to its monthly subscribers using an eVgo card, but as its website states, the company "will always take care of an EV driver in need of a charge."

Cost per Charge: eVgo offers various plans based on the needs of an EV driver and the electric vehicle they have chosen. This is an overview of their three most popular all-you-can-charge plans. Starting at \$30 a month, with a one-year service agreement, EV drivers have access to unlimited charging at the company's so-called Freedom Station sites, which includes Level 2 and DC fast charging. The \$40 a month Home plan, with a three-year service agreement, adds installation of your own home charging equipment—but not the cost of electricity that is separately metered. The Workplace plan is \$30 a month. See the pricing structure, which is unique to each region.

Decision: discarded due to coverage (operates primarily in Mid and West U.S.) and little presence in the marketplace. Requires monthly subscription.

### **GE WATTSTATIONS**

Approximate Number of Sites: 270 Coverage: 32 states, DC and Puerto Rico. Price of desirable unit: \$5,499.00 (not including installation, structural elements, permits, etc.).

Access: WattStations require an RFID card, even when non-networked and free.

Cost Per Charge: Prices vary, as established by owners.

Technical Support: Unknown

Decision: discarded due to insufficient data.

### **SEMACONNECT**

Background: Maryland-based SemaConnect offers Level 2 commercial grade EV charging station equipment and management software called SemaCharge. Their focus is on making charging as easy as possible for EV drivers and station owners. The company says it's the fastest growing network on the east coast. SemaConnect is the third largest supplier of commercial grade Level 2 charging stations based on number of stations deployed. Price of desirable unit: unable to get unit pricing.

Approximate Number of Sites: 450

Coverage: SemaConnect stations are located in about 20 states, with the greatest concentration in Maryland, Virginia, Washington, DC, Georgia, California and the Pacific Northwest. It also has a presence in Puerto Rico.

Access: To sign up, log on to the SemaConnect website, and open a new account with a \$20 balance charged to a major credit card. You will receive a "SemaCharge Pass" RFID card that can be used to initiate charging at any SemaConnect location. If the balance drops below \$0.00, the associated credit card will add another \$20 to your account. SemaConnect also offers mobile payments via its smartphone application, toll-free number, or via a QR code scan.

Cost per charge: The cost varies, as determined by the property owner.

Decision: discarded due to little presence in the marketplace. Requires opening charge accounts.

### **SHOREPOWER CONNECT**

Background: Shorepower Technologies manufactures, sells and operates equipment for truck stop electricity services, as well as electric vehicle charging equipment. Most of the truck stop sites have standard charging outlets (e.g., NEMA 5-20, NEMA 14-30 and NEMA TT-30), accessible to EV drivers with the appropriated adapter cords. Relatively few of the locations also have charging stations with standard J1772 connectors. Price of desirable unit: unable to get unit pricing.

Approximate Number of Sites: Shorepower has about 425 locations, with more than 2,000 individual connection points.

Coverage: Charging locations, mostly at truck stops, are spread widely across the U.S. in approximately 30 states.

Access: Use the toll-free hotline, kiosk or web browser to activate service via a credit card. There is a \$1 activation fee.

Cost per charge: For paid stations at Level and Level 2, the fee is \$1 per hour. Locations with J1772 equipment, mostly on west coast, are free.

Decision: discarded due to coverage little presence in the marketplace. Focuses on trucks.

### **TESLA SUPERCHARGERS**

Background: In fall 2012, Tesla Motors, the makers of the Model S sedan, rolled out its first so-called "Superchargers," in order to make road trips available for free to owners of its sporty luxury sedan. Price of desirable unit: unit not for sale in Pompano Beach (estimated costs over \$100-200k).

Approximate Number of Sites: As of July 2014, there are about 104 available Superchargers.

Coverage: Supercharger stations are situated throughout the United States.

Access: Tesla Superchargers do not require a card to initiate. Model S owners simply drive up and plug in. The chargers are available to owners of Model S models with the 85 kWh battery pack, or cars with the 60 kWh pack that have been configured to use Superchargers.

Decision: discarded due to lack of response from Tesla. Firm installs own units to service Tesla vehicles, only.



# Florida Electric Vehicle (EV) Overview

December 2015

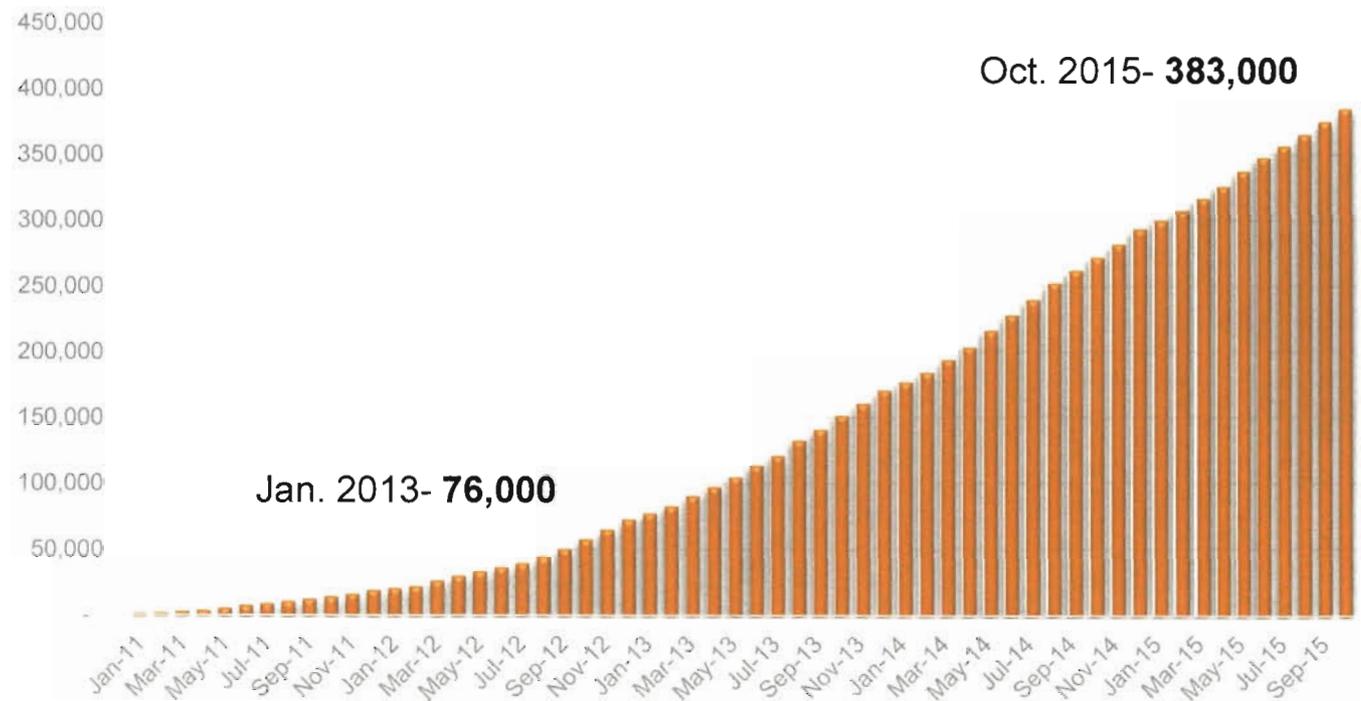
**Jody McDevitt**  
Account Executive  
614.296.2437 mobile

# US Growth of Electric Vehicles

5 x increase in less than three years.



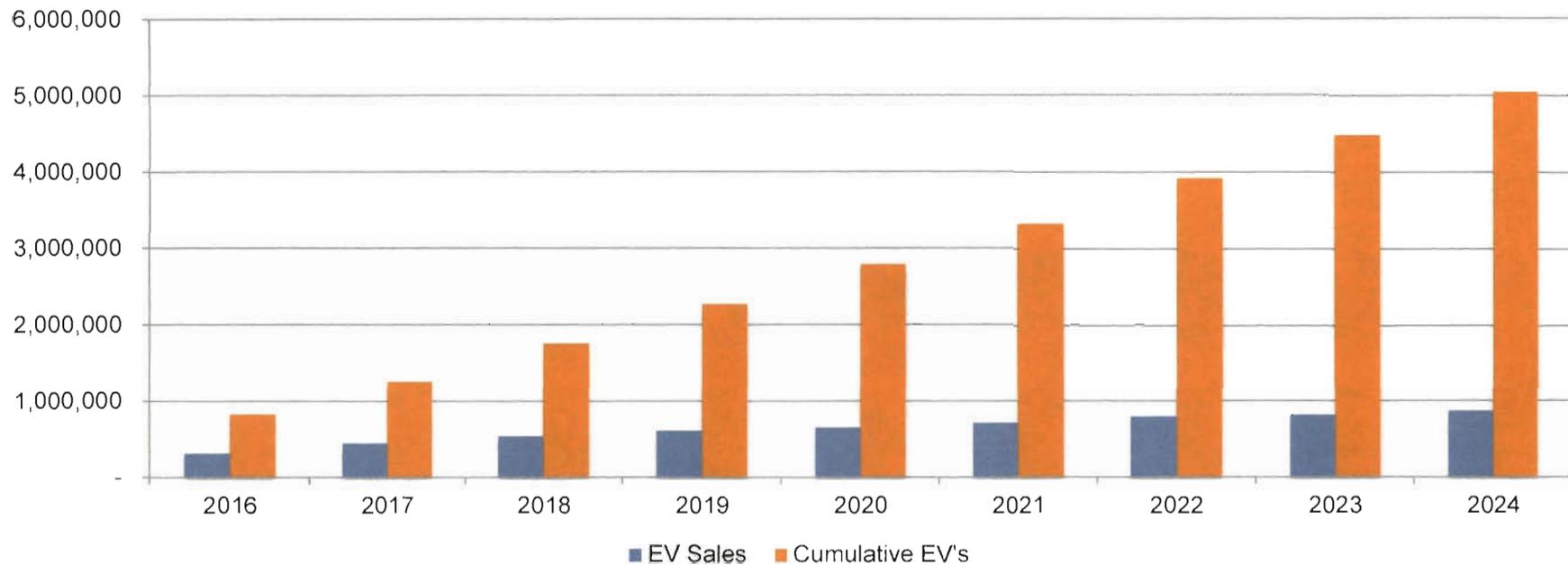
## US Cumulative EV Sales by Month



# Electric Vehicle Forecast

Navigant Research projects over 5 million on the road by 2024.

EV Forecast 2016-2024 (US)



Source: Navigant Research

# What To Look For In The Parking Lot or Garage



# More Models Are Coming



AUDI: A3 e-tron



November 2015

HYUNDAI: Sonata



Est. 2016

MITSUBISHI: Outlander



Est. 2016

CHEVROLET: Bolt



Est. 2016

AUDI: Q7 e-tron



Est. 2016

VW: CrossBlue



Est. 2017

AUDI: e-tron quattro



Est. 2018

PORSCHE: Mission E



Est. 2018

HYUNDAI: New sedan



Est. 2016

HONDA: New



Est. 2018

FORD: New



Est. 2018

TESLA: Model 3



Est. 2018

HONDA: New



Est. 2018

- + Volkswagen Group, Volvo: all models will have a plug-in option
- + Ford: by 2020 more than 40% of Ford's vehicles will be electrified
- + BMW: all models will have a plug by 2025
- + Hyundai: 12 PHEV models by 2020

# Top 20 States: Registered EVs, Q3 2015

Rank	State	Q3'14	Q3'15	Q3'14/Q3'15 Growth
1	California	112,617	170,266	51%
2	Georgia	12,528	22,511	80%
3	Washington	10,939	15,532	42%
4	New York	10,453	13,425	28%
<b>5</b>	<b>Florida</b>	<b>9,144</b>	<b>13,403</b>	<b>47%</b>
6	Texas	8,644	12,596	46%
7	Michigan	8,542	9,493	11%
8	Illinois	6,140	8,095	32%
9	Oregon	5,019	7,560	51%
10	New Jersey	5,563	7,459	34%
11	Arizona	3,826	5,990	57%
12	Massachusetts	4,207	5,845	39%
13	Pennsylvania	4,139	5,728	38%
14	Maryland	4,772	5,589	17%
15	Colorado	3,551	5,248	48%
16	Ohio	3,459	4,885	41%
17	Virginia	3,268	4,649	42%
18	North Carolina	3,098	3,965	28%
19	Hawaii	2,742	3,816	39%
20	Connecticut	2,237	3,184	42%

Note: These numbers have been revised to NOT include GEM electric vehicles which are neighborhood EV's.



# Florida ChargePoint Drivers



- + **5,925** ChargePoint Drivers in FL
- + Drivers within 100 miles of:
  - Tampa = 3,055
  - Orlando = 2,968
  - Miami = 2,137

AAA, Amalie Arena, Assurant, AutoNation, Baptist Health, BMW, Buffalo Wild Wings, DHL, Disney, Fidelity, FPL, FSU Florida DOT, Loews Hotels, NASA, Orlando Health, OUC, Raytheon, Royal Caribbean Cruises, Salvador Dali Museum, Tampa International Airport, TECO, USF, Cities of: Bradenton, Clearwater, Fort Lauderdale, Kissimmee, Miami, Oldsmar, Orlando, Palmetto, St. Petersburg, Tampa, West Palm Beach, Winter Park, etc..



**1,212** charging locations across Florida

# ChargePoint: The Leader in EV Charging

- Invented the networked charging station in 2007, shipping since '08
- Largest, most robust, feature-rich network in the world
- Only vendor with complete family of solutions
- Only vendor in the world that has implemented OCPP 2.0
- Innovative, industry leading Assure Maintenance Services

## + Top Investors

- Kleiner Perkins
- Constellation Energy
- Braemar Energy Ventures
- Voyager Capital
- Rho Capital Partners
- BMW, Toyota



ChargePoint Home



CT4000 Public Charging Station



CPE200 50 kW DC Fast Charging Station



CPE100 24 kW DC Fast Charging Station



CT600 Fleet Charging Station



## Level 2 Stations – 4 Flavors

### + Dual Port Level 2 Charging Stations

- 2 charging ports per station
- Ribbed Anodized Aluminum
- Power: 208/240 VAC 30 A
- Connector: SAE J1772™
- Bollard and wall-mount format
- Powershare
- PowerSelect
- LCD Video Display
- Locking Holsters
- Clean Cord Management



CT4021  
(Dual Port Bollard)



CT4023  
(Dual Port Wall-Mount)

### + Single Port Level 2 Charging Stations

- 1 charging port per station
- Ribbed Anodized Aluminum
- Power: 208/240 VAC 30 A
- Connector: SAE J1772™
- Bollard and wall-mount format
- LCD Video Display
- Locking Holster
- Clean Cord Management



CT4011  
(Single Port Bollard)



CT4013  
(Single Port Wall-Mount)

This is why you need clean cord management...it makes for a better driver experience.  
Keep the cord off the ground



# Branding/Advertising Opportunities



Atlanta Falcons



University West GA



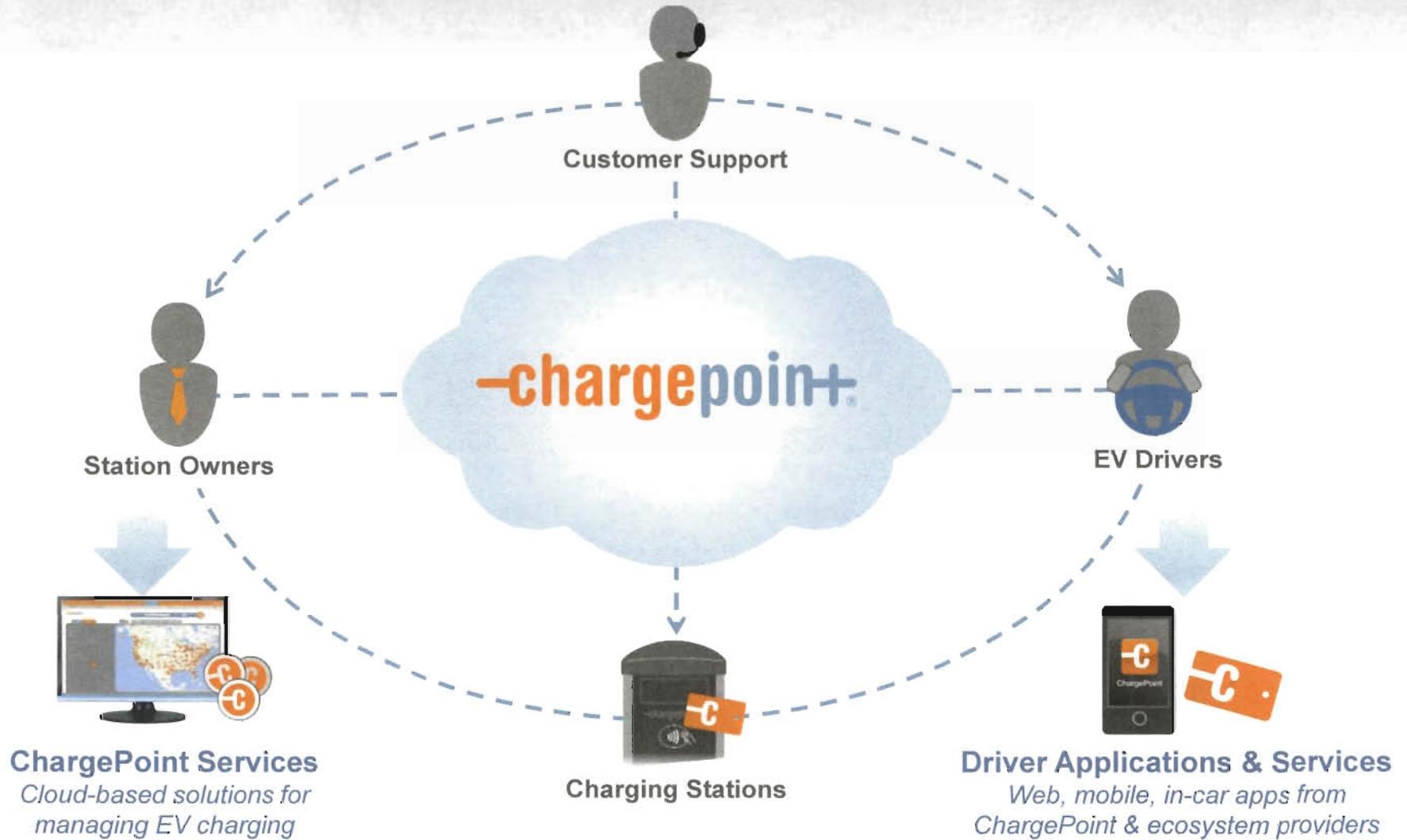
Tesla

City Dahlonega



Full Motion Video

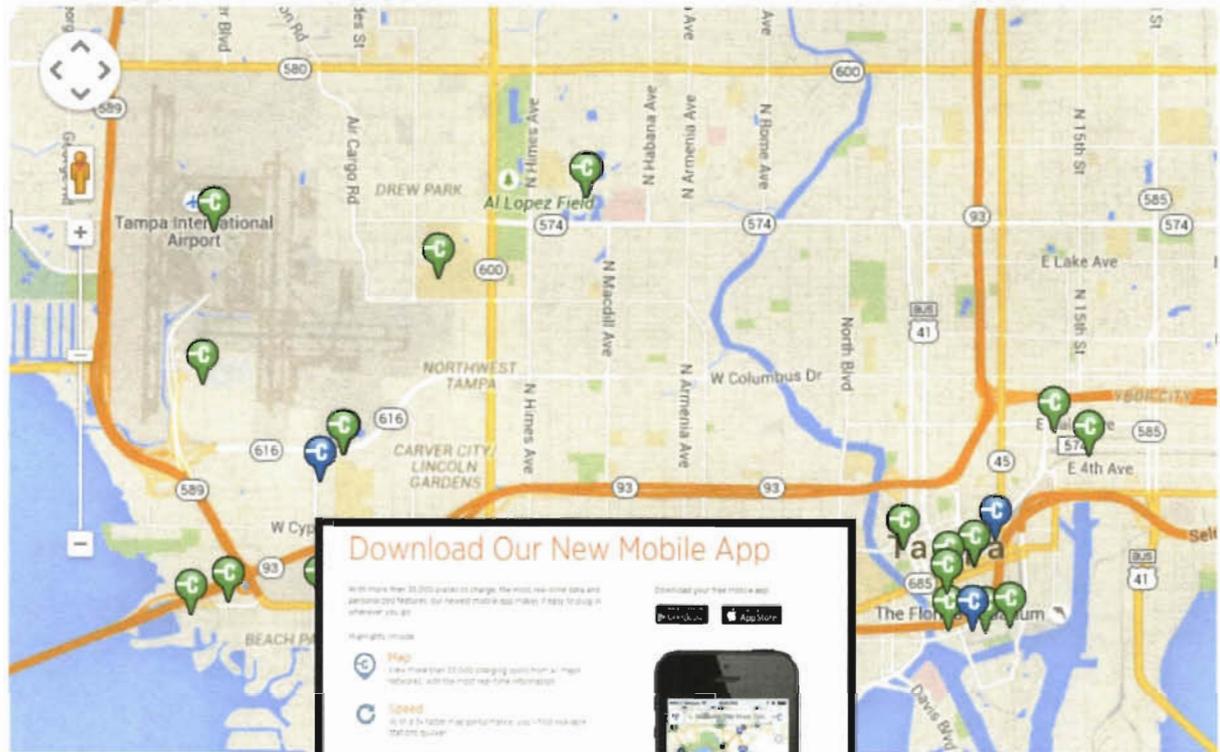
# ChargePoint Approach



# What ChargePoint looks like to EV Drivers

Sort by Distance

- CITY OF TAMPA / CITY HALL 01**  
420 E Jackson St, Tampa, Florida 33602, United States  
Distance 0.204 (Miles) [Get Directions](#)
- HILLS. COUNTY / CTR GARAGE 02**  
601 E Kennedy Blvd, Tampa, Florida 33602, United States  
Distance 0.225 (Miles) [Get Directions](#)
- HILLS. COUNTY / CTR GARAGE 01**  
601 E Kennedy Blvd, Tampa, Florida 33602, United States  
Distance 0.228 (Miles) [Get Directions](#)
- CITY OF TAMPA / POE GARAGE 02**  
802 N Ashley Dr, Tampa, Florida 33602, United States  
Distance 0.279 (Miles) [Get Directions](#)
- CITY OF TAMPA / POE GARAGE 01**  
802 N Ashley Dr, Tampa, Florida 33602, United States  
Distance 0.283 (Miles) [Get Directions](#)



### Download Our New Mobile App

With more than 30,000 places to charge, the most real-time data and personalized features, our newest mobile app makes it easy to plug in whenever you go.

Download your free mobile app on [Google Play](#) or [App Store](#).

**Highlights include:**

- Map** View more than 30,000 charging spots from a "heat" overlay, with the most real-time information wherever you go.
- Speed** Get a 2x faster map refresh rate, so you'll always get the latest.
- Start a Charge** Charge your car in 10 minutes or less.
- Notifications** Get real-time updates about your charging status.
- Predictive Search** Quick & easy way to find the best charging station near your destination.

**Other Features:**

- Information You Need** Get station details like real-time availability, pricing, power, output, and much more.
- My Spots** Favorite charging stations and easily access recently visited stations.
- Satellite View** First station closest to the parking spot.
- Navigator View** Get turn-by-turn directions using the navigation app of your choice like Waze, Google Maps and Apple Maps.

# Co-Branded Driver Kits by ChargePoint



Nissan LEAF



Chevrolet Volt



ChargeNow - BMW i3



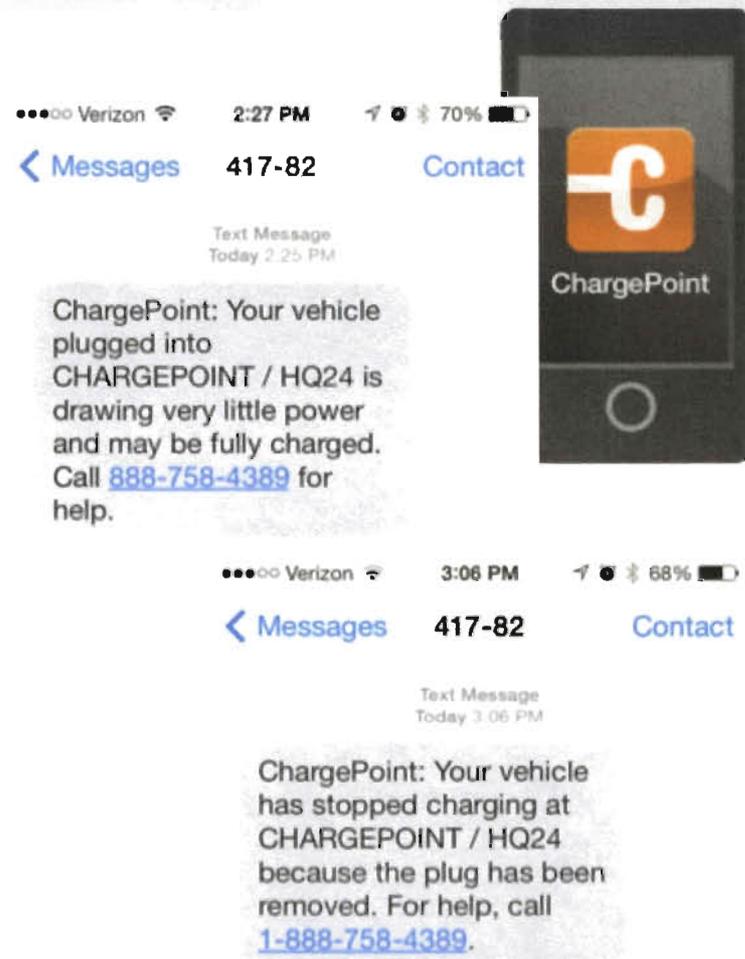
Avalon



VW e-Golf

# Driver Benefits of ChargePoint

- + ChargePoint station mapping built into in-dash navigation of vehicles
- + App is downloadable on all mobile devices (phone, tablet, etc.)
- + Get turn-by-turn directions to stations
- + See station availability in advance (in use or open)
- + Get text or email alerts upon certain milestones:
  - When car is finished charging
  - If someone else unplugs their car
  - If there is ever a problem with the station they are using
  - If there is a special promotion
- + 24x7x365 live ChargePoint Support
- + Waitlist, Pricing Change Notifications



# Station Owner Benefits of ChargePoint



- + Drivers supported 24x7x365 via live ChargePoint support team (onsite staff not bothered)
- + Control access of who can use the stations
- + Create groups with their own specifications (ie: employees vs. visitors)
- + Set pricing
- + Provide multiple payment options (CC/PayPal)
- + Collect payment automatically (ChargePoint is PCI compliant)
- + Track and report on:
  - Environmental impact (GHG and petroleum offsets)
  - Station utilization
  - Energy (kWh) consumption and costs
  - Revenue
  - Real-time occupancy status
  - Monthly/quarterly reports pushed to administrator
- + Brand and Advertise on stations

## ChargePoint Assure

### The Most Comprehensive Station Maintenance & Management Program in the Industry

- + 98% Annual Station Uptime Guarantee
  - With non-performance penalties
- + One Business Day Response Time
- + 24 x 7 x 365 Station Monitoring
- + 24 x 7 x 365 Driver Support (Drivers call us, not you)
- + Station Owner Support (8AM EST – 9PM EST, M-F)
- + Proactive Dispatch
- + On & Offsite Labor Coverage for Vandalism & Accidents
- + Monthly Summary & Quarterly Detailed Reports
- + Unlimited Software Configuration Changes

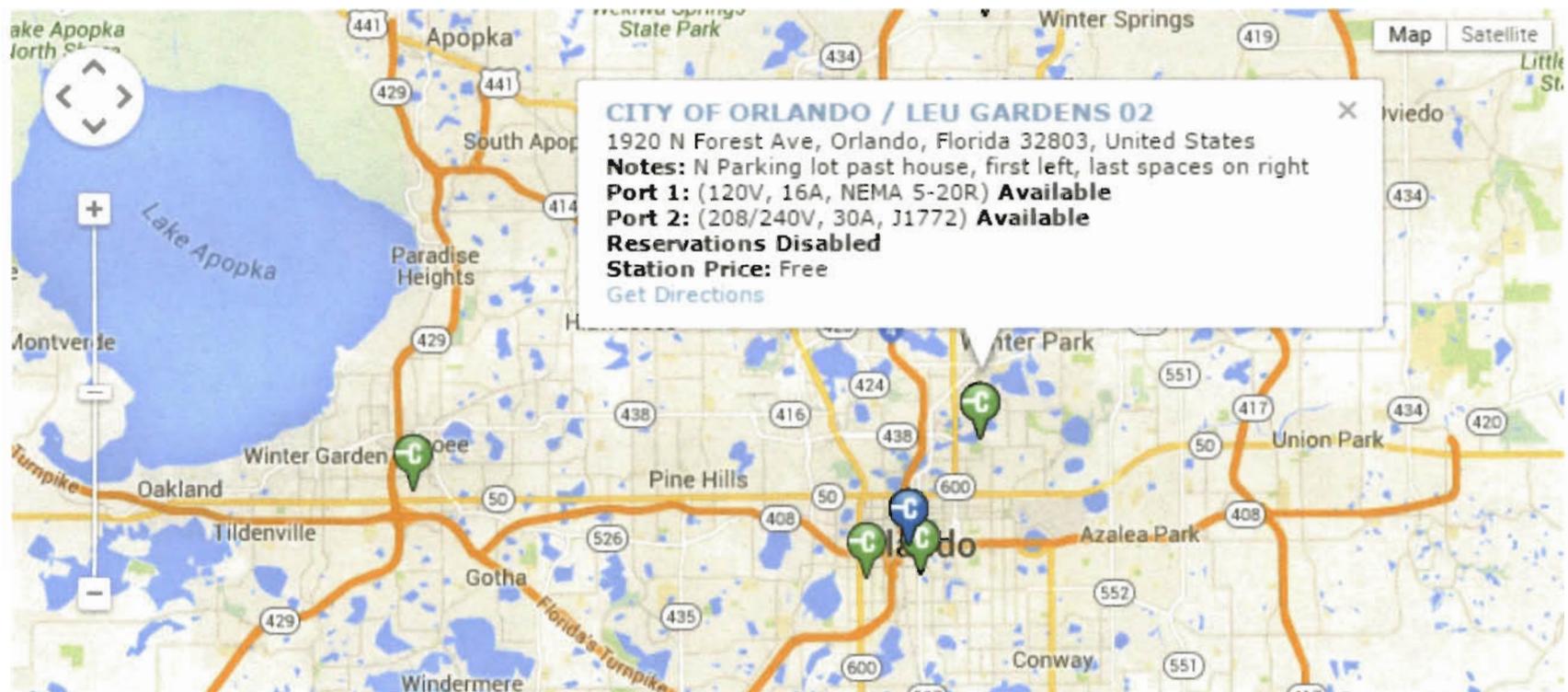


**KL Contract Contingency**  
**DOES NOT INCLUDE OWNER CONTINGENCY OR OWNER ALLOWANCES**

Date authorized	KL Use of Contract Contingency				KL Buyout Saving Status				Owner Controlled in KL Budgets			
	Add to Contractor Contingency	Deduct from Contractor Contingency	Balance	Status	Add to Buyout Saving	Deduct from Buyout Savings	Balance	Status	Add to Owner Control Amount	Deduct from Owner Control Amount	Balance	Status
		STARTING	\$232,251.00			STARTING	\$0.00			STARTING	\$0.00	
<b>APPROVED/REVIEWED</b>	<b>SUBCONTRACTOR</b>											
Adjust for Bond Cost (CCA#2)	7/21/2015											
<b>Award Letters</b>												
Exterior Fabric Sails	6/25/2015	Birdair			\$0		\$0.00	Approved				
Sitework	6/29/2015	Stanford			\$0	\$33,780.00	\$33,780.00	Approved				
Precast Concrete	6/16/2015	Metromont			\$33,780		\$0.00	Approved				
Precast Concrete (CORRECTION)	10/28/2015	Metromont				\$50.00						
Structure Demolition	6/29/2015	Alpha			\$13,470		\$13,420.00	Approved				
Deep Foundations	7/21/2015	MB Drilling			\$67,961		\$81,381.00	Approved				
Electrical	7/24/2015	EDL			\$36,525	\$2,000.00	\$115,906.00	Approved				
Elevator	8/4/2015	Thyssen			\$17,909		\$133,815.00	Approved				
Strutural Steel/Misc. Metals	8/4/2015	Steel Fab			\$48,714		\$182,529.00	Approved				
Plumbing	7/10/2015	Plumbing Mar			\$49,044		\$231,573.00	Approved				
Well Drilling	7/24/2015	Jaffer			\$0		\$231,573.00	Approved				
Cast in Place Concrete	8/4/2015	Sovereign			\$29,631		\$261,204.00	Approved				
Glass and Glazing	9/16/2015	Sasser			\$265,142		\$526,346.00	Approved				
HVAC	9/23/2015	Natal			\$15,085		\$541,431.00	Approved				
Waterproofing	10/6/2015	ServicePro			\$9,773		\$551,204.00	Approved				
Metal Fabrications	10/6/2015	o8o			\$22,413		\$573,617.00	Approved				
Fire Protection	10/6/2015	Wigington			\$116,925		\$690,542.00	Approved				
Temp Fence Windscreen Credit	7/15/2015					\$10,925.00	\$679,617.00	Approved				
OH Doors	10/29/2015	JB Matthews				\$6,466.00	\$673,151.00	Approved				
Doors/Frames/Hardware/Fireproofing/DW	10/29/2015	Lotspeich				\$20,230.00	\$652,921.00	Approved				
<b>CCA 1</b>												
Credit for Builder's Risk	8/25/2015								\$115,000.00			
Credit for windscreen change	7/15/2015								\$10,925.00			
										Remaining	\$125,925.00	Approved
<b>CAA 8</b>												
Pier Street Redesign per BCTED Comments	7/17/2015									\$9,700.00		
Tourism Office Redesign	7/17/2015									\$9,500.00		
										Remaining	\$106,725.00	Approved
<b>PCCUR #22</b>												
Credit direct payment for Builder Risk	10/5/2015									\$98,301.00		
										Remaining	\$8,424.00	Approved
<b>CCA 4 (owner)</b>												
Remove dirt inside lift station	9/16/2015									\$8,392.00		Approved
NEW ITEMS										Remaining	\$32.00	
<b>CCA 3</b>												
Blue rooftop canopies - Birdair	10/14/2015				\$54,769.00			Approved				

# Station Owner – Portal View & Sample Reports

## Station Map – real time visibility



## View of real-time station(s) status

# Analytics - Energy Used



All stations



By individual station

# Analytics



**GHG Savings**  
(This graph will typically follow the energy used slope)

## # Unique Drivers

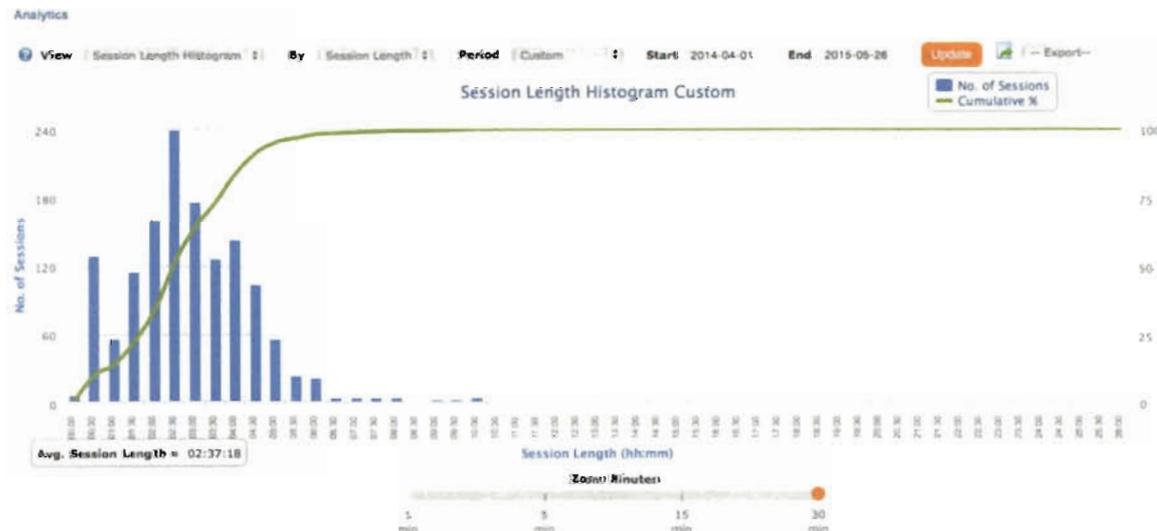




Number of Charging Sessions

## Average Session Length

(Drivers are connected avg. 2.37 hours. The pricing policy has developed the proper behavior so the drivers stay less than 4 hours to better utilize the asset. Waitlist will further help drive utilization)



# Station Revenue



Apr, 2014 – May 2015

Projected revenue for 12 months is ~ \$3,800. This station has paid for the annual services plan and electricity dispensed. It is generating an ROI for the station HW.

# Utilization



## Analytics

**View** Average Utilization **By** Object **Period** Last 90 Days **Update** **Export**  
Between 10:00 am and 4:00 pm  Weekdays  Weekends  Both **Include:**  Level 1  Level 2  DC  
Page 1 of 1 50 Orgs per page

### Average Utilization Last 90 Days

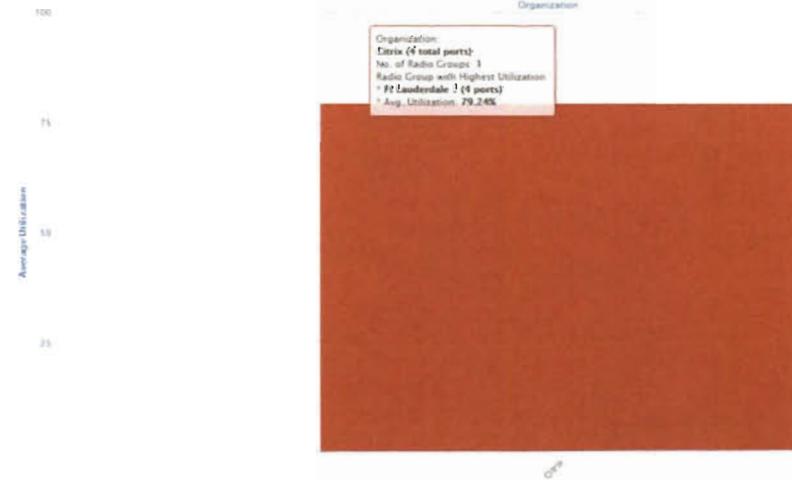
Organization



**View** Average Utilization **By** Object **Period** Last 90 Days **Update** **Export**  
Between 9:00 am and 5:00 pm  Weekdays  Weekends  Both **Include:**  Level 1  Level 2  DC  
Page 1 of 1 50 Orgs per page

### Average Utilization Last 90 Days

Organization



# 4,200+ Organizations Use ChargePoint

Workplace	Retail	Parking	Hospitality	MDU	Energy	Stadiums	Municipalities	Education	Healthcare

## We have the Drivers



**~ 50%**  
of all EV drivers carry a ChargePoint card



**75%+**  
of EV drivers who choose a network, choose ours



**12,000,000+**  
Charges delivered

## We have the Network



**70%+** market share of commercial networked  
**90%+** market share of new installations



**25,000+**  
charging spots



**4,300+**  
organizations use ChargePoint

## We've made a Difference



**83,778,500+**  
pounds of CO<sub>2</sub> avoided



**11,600,000+**  
gallons of gas avoided



**290,000,000+**  
gas-free miles driven



