



PORT COLBORNE

Subject: Electric Vehicle Charging Station – Installation for Public Use

To: Council

From: Public Works Department

Report Number: 2023-78

Meeting Date: April 25, 2023

Recommendation:

That Public Works Department Report 2023-78 be received; and

That City Council authorize the Chief Administrative Officer and Director of Public Works to negotiate and execute an agreement with FLO Services Inc. consistent with the financial implications as outlined in this report, and for a period of up to ten years.

Purpose:

The purpose of this report is to seek approval from Council to enter into an agreement for the supply, delivery, installation, operation, and maintenance of electric vehicle charging stations in public parking areas within the City.

Background:

Starting in 2021, City staff began researching the installation of electric vehicle (EV) charging stations for public use. Initially staff were directed to apply for funding to offset the purchasing cost of a level 3 EV charging Station. Level 3 EV charging stations refer to direct current fast charging, which offers the fastest charging speeds. Level 3 EV charging stations are a particular draw for EV owners (compared to the lower current options) as the majority of level 3 EV charging stations on the market supply 50 kW of power, which adds about 80 km of range in 20 minutes.

The project was initiated to help City infrastructure support the City's commitment to reduce greenhouse gas (GHG) emissions. Installing EV charging stations not only provides a valuable service to residents and tourists but allows the City to demonstrate leadership in reducing GHG emissions. The charging stations would support the tourism

industry and the availability to travel to, from, and within the City. Installing EV charging stations near the downtown core will allow people to charge vehicles while they explore the area.

The project also recognizes that, according to Statistics Canada, seven in ten Canadians who plan to buy a new vehicle within the next five years are likely to buy an electric vehicle (either pure or hybrid), not providing charging infrastructure could deter tourism. This initiative also supports Fleet Focused Objective #2 of the City's Greenhouse Gas Emissions Reduction Plan, approved by Council in February 2020, to develop a plan for implementing electric vehicle charging facilities to address near and longer-term plans for electrification of transportation.

Initially the City's focus of the project was to purchase and install a Level 3 EV charging station at Market Square. This project was conditionally approval based on at least 40% of the capital cost being secured through external funding sources. Staff applied to several delivery agencies of the Investing in Canada Infrastructure Program but were unsuccessful in securing this funding. During the application process, staff became aware of the extent of responsibility associated with owning and operating EV charging stations. Ownership would result in an increased demand on staff due to maintenance and customer service requests that result from the use of the charging stations. Additionally, there is typically a cost to the owner for a subscription for the operating software, payment platform, and electricity usage. In September of 2022, staff began exploring alternative options for providing public EV charging station access.

Staff contacted four major electric vehicle charging station suppliers asking for proposals for the supply, delivery, installation, and operation of electric vehicle charging stations in public City parking spaces. The City specifically asked about the possibility of a model wherein the delivery organization maintains ownership and responsibility over maintenance. Of the four companies to respond only FLO Services Inc. (FLO) provides this type of service through their Infra program.

Discussion:

After considerable research and a lengthy process, City staff recommend entering an agreement with FLO to supply and install charging stations in City owned public parking lots. Currently the available charging stations are identified as Level 2 and Level 3. Level 2 EV charging stations operate at 220 volts and can provide a typical EV with a full charge in 3 to 4 hours. Level 3 EV charging stations operate at 450-1000 volts of direct current (DC) and can provide a full charge in less than one hour.

Currently, FLO operates Canada's largest public EV charging network. In addition to providing charging stations, FLO has the following key offerings/abilities through their network:

- Each station installed is connected via cellular network, allowing EV vehicle operators to discover their locations and availability via the FLO app, and in many cases via their onboard vehicle navigation systems.
- The network connectivity also allows FLO staff to monitor station use and detect any interruption in operability requiring attention.
- FLO provides 24/7 customer assistance via telephone and their smart phone app.
- Through FLO's Infra program, FLO maintains ownership and operational responsibility, while the City merely provides the space for the charging stations.

FLO has proposed a phased approach to building an EV charging network within the City. The four parking lot locations identified in the first phase include the Sugarloaf Marina, H.H. Knoll Park, Market Square, and the Vale Health and Wellness Centre (VHWC). The main objective of FLO is to install a dual port level 3 charging station at the VHWC. The VHWC has been identified as an ideal location for this type of charging station, due to its proximity to Highway 140. Staff had focused on other locations in the past due to the substantially higher cost associated with the civil work required to install and operate a charging station at the VHWC; however, if the City enters into this agreement, FLO is committed to paying for all costs associated with the installation of a level 3 EV charging station at the VHWC.

At the remaining locations FLO has proposed to install level 2 charging stations at the following locations:

- Market Square, where FLO has proposed four charging stations.
- The Sugarloaf Marina, where FLO has proposed two charging stations.
- H.H. Knoll Park, where FLO has proposed two charging stations.

The extent of this portion of the project will depend on the City's budget to cover the civil work required at these sites. The City's 2023 Operating Budget allocated \$20,000 for EV charging stations. At the time of writing this report, the cost of this work is being assessed.

As EV adoption continues to grow, so does the need for charging infrastructure. The provision of publicly available EV charging infrastructure will offset the cost of EV ownership by increasing access for households with limited ability to install on-site charging or who have less access to on-site dedicated parking opportunities, thus making EV operation more affordable.

It will be important to continue to emphasize the establishment of equity considerations as key siting criteria when planning investments in EV charging stations in order to avoid exacerbating existing disparities in the transportation system and commit to the City's core value of responsibility to make tomorrow better.

Internal Consultations:

Staff consulted with Community Safety and Enforcement to determine necessary amendments to Municipal Parking Lot By-law 3475/56/97.

Community Safety and Enforcement staff have drafted an amendment to Municipal Parking Lot By-law 3475/56/97.

Amendments to Municipal Parking Lot By-law 3475/56/97 will be finalized and brought to Council at a later date, in the event that Council accepts the recommendations of Report 2023-78 Electric Vehicle Charging Station – Installation for Public Use.

Staff consulted with Corporate Services to determine funding options.

Staff consulted with Corporate Services to determine the proper channels for proposal and procurement processes.

Financial Implications:

FLO will pay for all costs associated with the provision, installation, operation, and maintenance of the level 3 EV charging Station at the VHWC.

The only cost to the City associated with this agreement will be for the civil work required to supply an electrical connection to the level 2 charging stations. The provision, operation, and maintenance of the level 2 EV charging stations will be covered by FLO.

FLO will pay for the cost of utilities for all charging stations.

The 2023 Operating Budget allocated \$20,000 for EV charging stations. Should additional funds be required for the civil work to bring electricity to the level 2 charging stations, staff will prioritize Market Square and come back to Council with alternative funding options.

Strategic Plan Alignment:

The initiative contained within this report supports the following pillar(s) of the strategic plan:

- Service and Simplicity - Quality and Innovative Delivery of Customer Services
 - Attracting Business Investment and Tourists to Port Colborne
 - City-Wide Investments in Infrastructure and Recreational/Cultural Spaces
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Conclusion:

Entering into this agreement provides an opportunity to the City to meet objectives of both the City's Strategic Plan and the corporate Greenhouse Gas Reduction Plan, without having to invest a significant amount of capital funds. This project will provide a public service, as well as demonstrate the City's commitment to an equitable green future consistent with the corporate value of Responsibility defined as "we make tomorrow better". The phased approach will provide the City with flexibility in the roll out to other locations.

Respectfully submitted,

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Report Approval:

All reports reviewed and approved by the Department Director and also the City Treasurer when relevant. Final review and approval by the Chief Administrative Officer.