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CITY OF MEDICINE

CITY OF DURHAM | NORTH CAROLINA

Date: February 21, 2017

To: Thomas J. Bonfield, City Manager

Through: W. Bowman Ferguson, Deputy City Manager

From: Steven W. Hicks, General Services Director

Subject: Acceptance of $10,000 Electric Vehicle Charging Station Grant from Duke Energy.

Executive Summary
This item establishes a Grant Project Ordinance (GPO) to receive revenues from the Duke Energy Plug-In Electric Vehicle Charging Station Project.

The City applied for and received grant funding from Duke Energy to install one dual-cord electric vehicle charging station (EVCS) at the Corcoran Street parking deck. This is a reimbursement grant.

Recommendation
The General Services Department recommends the City Council Adopt the City of Durham Duke Energy Plug-In Electric Vehicle Charging Station grant project ordinance, and authorization to excecute grant agreement in the amount up to $10,000.

Background
Last fall, the City applied for and received a $10,000 reimbursement grant from Duke Energy to install a dual-cord level 2 electric vehicle charging station in a parking deck. After careful review of the electrical capacity and space needs, as well as market forces, staff from General Services and Transportation have recommended that the charging station be installed on the 4th level of the Corcoran Street parking deck. The funds will be used to reimburse the General Services Department for funds expended for the following purposes: purchase and installation of one dual-cord electric vehicle charging station at the Corcoran Street parking deck.

The charging station will be installed by the end of April.

The City currently has two EVCS units that are accessible by the public located at Goldenbelt. These stations are also used by Community Development and Neighborhood Improvement Services to charge their electric vehicles (EV). The County has 12 EVCS units that are available to the public, two of which are also used to charge county EVs.

The Sustainability Office conducted an on-line survey of EV drivers in 2016 and identified their preferences regarding charging stations. A majority of respondents to this survey reported:

- The average session at public charging stations in Durham is 1-2 hours.
- Centre Deck and Corcoran Street deck are the city-owned parking areas where there is most demand for new charging stations.
- Participants indicated that if there were charging infrastructure available at these locations, participants would come to these locations more often and spend more time in the area.
- There is a willingness to pay up to $1/hour to use electric vehicle charging stations in these locations.

Issues/Analysis
Electric vehicles are part of the strategy to reduce Durham's greenhouse gas emissions from transportation and improve air quality. Both vehicles and charging station technologies and practices are changing rapidly.

- Durham County has seen 18% growth in year over year registration of EVs from 2015 to 2016.
- Use of public stations has increased 460% from 2013, showing that there is a growing demand for stations.
- The addition of EV charging infrastructure will assist in developing the adoption of electric vehicles within the county and surrounding areas by providing infrastructure which alleviates "range anxiety," one of the biggest barriers to widespread EV adoption.
- Durham's target for community greenhouse gas emissions is to reduce emissions by 30% from 2005 levels by 2030. Emissions from non-government vehicles accounted for a third of Durham's community greenhouse gas emissions; the addition of EV charging stations and increased adoption of EVs will help decrease greenhouse gas emissions in Durham and surrounding communities..

Alternatives
The Council may choose not to approve the GPO and not install the charging station.

The Council could decide not to approve the GPO and pay for the entire station from other funding sources.

Staff recommends proceeding with grant acceptance and project implementation as proposed.

Financial Impact
The grant will cover the purchase and installation of the equipment. The chosen equipment is available off state contract and will cost $6,217.50 including installation and the first year of maintenance and station management. There will be an additional cost of $2,280.00 to prepare the site for the station. Project costs are within the $10,000 grant threshold, therefore all costs are expected to be reimbursed. The City is responsible for on-going tmaintenance, repair, energy use, and connectivity costs.

Expected Expenditures	
Equipment, installation, first year maintenance and management	$6,217.50
Site preparation	$2,280.00

Total	$8,497.50*
Expected Reimbursement from Duke Energy Grant	$8,497.50*

* The grant will reimburse all eligible costs up to $10,000

UBE Summary
This is a grant and was not reviewed by the Department of Equal Opportunity/Equity Assurance Department for compliance with the Ordinance to Promote Equal Opportunities in City Contracting.