City of Carson City Agenda Report

Date Submitted: November 22, 2013 Agenda Date Requested: December 5, 2013

Time Requested: Consent

To: Mayor and Supervisors

From: Public Works

Subject Title: For Possible Action: To accept a grant from the Nevada Governor's Office of Energy (NGOE) and Nevada Energy for the installation of an electric vehicle charging station at the Carson City Community Center. (Schulz)

Staff Summary: Approval of this will allow Public Works to move forward with the procurement and installation of an electric vehicle charging station.

Type of Action Requested: (che	eck one)	
() Resolution	() Ordinance	
(X) Formal Action/Motion	() Other (Specify)	
Does This Action Require A Bus	siness Impact Statement: () Yes (X) No

Recommended Board Action: I move to accept a grant from the Nevada Governor's Office of Energy (NGOE) and Nevada Energy for the installation of an electric vehicle charging station at the Carson City Community Center.

Explanation for Recommended Board Action: The City has been presented an opportunity by the Nevada Governor's Office of Energy to participate in a grant to install an electric vehicle charging station. Nevada Energy will provide a \$7,000 rebate and the NGOE will provide \$3,500 towards the funding of the station and staff has determined that this will cover the procurement and installation of the station. There will be some minimal operational costs of the station once it's built. The agreement with NV Energy will require we provide free charging for electric vehicles for the first five years the system is in operation. The estimated cost to provide this is approximately \$200 per year, to a worst case of \$500 per year. After the five year period the City may charge a fee and could generate revenue if desired.

Staff feels this is in alignment with the City's goal from the 2012/13 Strategic Plan to become a clean and healthy environment and it will fit in well with our on-going efforts to be more sustainable.

Applicable Statute, Code, Policy, Rule or Regulation: NA

Fiscal Impact: Energy operation costs for the first five years estimated to be \$200/year.

Explanation of Impact: Will be paid for out of Public Works Energy budget.

Alternatives: Direct staff otherwise.

Supporting Material: Memo from Project Manager Tom Grundy

Prepared By: Darren L Schulz, PE, Deputy Public Works Director

Reviewed By:	(Public Works Director) (City Manager) (District Attorney) (Finance Director)		Date: 11-25-13 Date: 11/25/13 Date: 11/25/13 Date: 11/25/13
Board Action	Taken:		
Motion:		1)	Aye/Nay
(Vote R	Recorded By)		

PUBLIC WORKS DEPARTMENT

ADMINISTRATION

3505 Butti Way Carson City, NV 89701-3498 Ph: 775-887-2355 Fx: 775-887-2112

FLEET SERVICES

3303 Butti Way, Building 2 Carson City, NV 89701-3498 Ph: 775-887-2356 Fx: 775-887-2258

OPERATIONS

(Water, Sewer, Wastewater, Streets, Landfill, Environmental) 3505 Butti Way Carson City, NV 89701-3498 Ph: 775-887-2355 Fx: 775-887-2112

ENGINEERING/ TRANSPORTATION/ **CAPITAL PROJECTS**

3505 Butti Way Carson City, NV 89701-3498 Ph: 775-887-2355 Fx: 775-887-2112

BUILDING and SAFFTY PERMIT CENTER

108 F. Proctor Street Carson City, NV 89701-4240 Ph: 775-887-2310 Fx: 775-887-2202

PLANNING

108 E. Proctor Street Carson City, NV 89701-4240 Ph: 775-887-2180 Fx: 775-887-2278

HEARING IMPAIRED **Dial** 711

CARSON CITY NEVADA

Consolidated Municipality and State Capital



MEMORANDUM

Date:

11/182013

To:

Darren Schulz, P.E., Deputy Public Works Director

From:

Tom Grundy, P.E., Senior Project Manager 16

Subject:

Proposed Electric Vehicle Charging Station

I have been working with the Nevada Governor's Office of Energy (NGOE) regarding installing an electric vehicle charging station in the vicinity of the Community Center. Here is a summary of what I've determined.

First, timing is critical on this project. If we are to proceed, we need to have the station operational by 12/31/13.

NV Energy will provide a \$7,000 rebate after the unit is installed, and the NGOE will provide another \$3,500. After considering a number of locations, I believe there is a location where we can install the charging station for \$10,500 or less, excluding soft costs so the cost to the City will be minimal.

There will be some minimal operational costs associated with the charging station. The agreement with NV Energy requires that we provide free charging for electric vehicles for the first 5 years the system is in operation. I estimated that cost using todays energy rates to be about \$500/year to fully charge 1.5 vehicles per day, 5 days a week. In reality, it is unlikely that any electric vehicle will be fully charged at the station since it is unlikely that they will come to the facility fully discharged, so the average electrical cost is likely to be closer to about \$200/year. The charging station will be on the Chargepoint network, which is functionally similar to the commercial fueling network we use to purchase fuel for City vehicles. After the 5 year period, we can charge a fee to charge vehicles and generate some revenue, if desired.

The agreement also requires that we dedicate two parking spaces to the facility. As discussed below, I believe the Community Center is the best location for this facility. I understand that the Community Center parking lot fills up at times generally in the evenings. I anticipate that the charging station will be used primarily during the day. The location I believe to be the optimal location is the southernmost two stalls of the new parking lot on the west side of the Community Center. Discussions with the facility manager at the Community Center indicate that those stalls are not used for dropping off children or by the Aquatic Center, and I have noticed that those stalls are generally vacant most of the time. I am aware of one employee of the NGOE which intends to use the charging station. They are willing to move their vehicle once it is charged, and we will sign the stalls accordingly. Interestingly, modern electric vehicles send a notice to the owner's phone when the charging is complete!

Regarding the location, I considered three locations; the Community Center, the Aquatic Center and the Library. I discarded the Aquatic Center as an option due to the amount of trenching and asphalt patching necessary to get power to the charging station. I discarded the library as an option, for two reasons; conversations with facilities personnel indicate the electrical panels in the library are near capacity and there are no electrical panels in the library which are close to an exterior wall in the vicinity of an appropriate location for a charging station.

That leaves the Community Center. I believe the southernmost two stalls are the optimal location considering ability to get power to the station, convenience for the public, visibility and parking stall usage at the facility.

cc: