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I.4

City Council Regular Meeting**Meeting Date:** 07/18/2016**Recommended by:** Jim Thompson**Prepared by:** Steven Turner, Management Analyst**Finance Director Review:** Doug Sandstrom**City Attorney Review:** Brett Wallace**Approved by:** Jim Thompson**Date Submitted:** 05/31/2016**Type of Action Requested:** Ordinance

SUBJECT:

An ordinance authorizing the City Manager to accept the bid from Ameresco to change all streetlights with electricity provided by APS to LED Streetlights.

RECOMMENDATION:

City Staff recommends that the Mayor and City Council approve the ordinance to replace all streetlights with electricity provided by APS to LED Streetlights.

DISCUSSION:

Currently, there are 3,867 streetlights in the City of Casa Grande with electricity and maintenance provided by APS. The cost for electricity on this section of streetlights is \$307,016 and the cost of maintenance is \$2.35 per pole per month (\$109,049.40 per year). What City Staff is recommending tonight is changing the 3,867 streetlights from High-Pressure Sodium to Light-emitting Diode (LED). This change in technology will lead to significant savings on not only the electricity but also the maintenance.

The LED streetlights are 100,000 hour fixtures with a 10 year manufacturers warranty. The expected life of each fixture is almost 24 years. The proposed project reduces the Streetlight energy consumption by 68% and the billed utility costs are reduced by over 39%. The International Dark Sky Association is working with the astronomical community to minimize any light pollution and they are recommending the use of the LED fixtures with warmer color temperature of lighting (3000k).

All fixtures in this project have the future capability to interface to a city-wide wireless control system. The initial project will have the wireless control system along the Electric Light Parade Route (70 lights) which will allow the lighting to be dimmed or turned on/off.

FISCAL IMPACT:

Total Financed Project Cost - \$1,689,249

Estimated Utility Rebate - \$215,726

Finance Term - 15 Years

Finance Interest Rate - 2.0%

20 Year Benefit (Energy & Maintenance) - \$3,139,589 (Maintenance Benefit - \$2,035,884)(Electricity Benefit - \$1,103,987)

The City is paying for the project from the General Fund as a loan with 2% interest. The savings from the project in the Highway User Revenue Fund (HURF) will be used to repay the General Fund.

ALTERNATIVES:

Do not approve