Department: Parks & Recreation, Doug Woog Arena

Administrator: JR4

Agenda Item: LED Lighting conversion for Doug Woog Arena

Action to be considered:

Adopt Resolution 2018-152 for the conversion of the lighting system at Doug Woog Arena to LED lighting.

Overview:

The lighting at Doug Woog Arena was replaced in 2010 with funding from the Minnesota Office of Energy Security. The arena was awarded a \$100,000 no match grant from the Energy Efficiency and Conservation Block Grant program to convert all of the lights in the arena to the current fluorescent lighting systems. After analysis regarding installation cost, rebates, and energy savings, staff is making the recommendation to replace the current fluorescent lighting throughout the facility with LED bulbs.

Staff identified a rebate program through Xcel Energy for the transition to LED lighting, which is slated to change in 2019. According to Xcel Energy representatives, the rebate for 2019 will be under a new program and will not be funded as well as the current program. Staff wants to maximize the potential rebates available, thus the urgency to complete in 2018.

The project is considered a lamp replacement retrofit project. The project does not call for any of the current light fixtures to be replaced. The current bulbs and ballasts will be removed from the fixtures, some minor rewiring of the fixtures will be completed, and the bulbs will be replaced with LED tube type bulbs. This type of installation substantially reduces the cost of the project, while increasing the light levels and the energy saving benefits of LED lighting. Along with lamp replacement, the project also calls for motion sensing switches in the lobbies and bathrooms to further reduce energy consumption.

Staff requested bids for installation of the materials. The bids for the labor rates came back as follows:

Multitech Electric -- \$25,588.00 Davco Technologies Inc.--\$23,759.00 Premier Lighting --\$19,630.91

Premier Lighting, a lighting supply and installation company, would be supplying all of the necessary materials to complete the project. The cost of the materials, including recycling and freight cost is \$32,641.85. The Xcel Energy rebate for the materials is \$26,973.65. Leaving the final total for materials at \$5,668.20.

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Staff is recommending the low bid for installation from Premier Lighting:

Installation low bid: \$19,630.91.

Material cost after rebates: \$5,668.20.

The total cost for material and installation: \$25,299.11

Staff had estimated \$19,100 for the project through the Capital Improvement Program. The labor rates for the project came in slightly higher than expected resulting in a \$6,199.11 cost over budget estimates. The energy efficiency gained by this project is estimated to save \$36,000 annually in lighting costs while also saving \$6,000 annually in maintenance. Considering the operational cost savings, the estimated payback for the original cost of the project or return on investment, is 8 months. Although the project exceeds the estimated budget amount, the estimated payback and future savings show it is well worth the investment.

Source of Funds:

2018 CIP Fund

City of South St. Paul Dakota County, Minnesota

RESOLUTION NO. 2018-152

APPROVE THE LED LIGHTING CONVERSION AT DOUG WOOG ARENA

WHEREAS, Doug Woog Arena has inefficient fluorescent lighting and it was identified that utility savings could be realized with a conversion to LED lighting; and

WHEREAS, three electrical electrical contractors submitted quotes: Multitech Electric Inc., Davco Technologies, and Premier Lighting; and

WHEREAS, the three electrical contractors submitted quotes to re-lamp and rewire existing fixtures to accommodate LED bulbs and install motion sensing switches; and

WHEREAS, Premier Lighting is the lowest responsible bidder; and

WHEREAS, the City of South St. Paul and Premier Lighting enter into an agreement to complete the project as quoted; and

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of South St. Paul, Minnesota, that Premier Lighting be selected to perform the LED lighting project at Doug Woog Arena for the amount of \$25,299.11.

Adopted this 4th day of September 2018

City Clerk		