

City of Columbia

701 East Broadway, Columbia, Missouri 65201



Agenda Item Number: (A) _____

Department Source: Parks and Recreation

To: City Council

From: City Manager & Staff

Council Meeting Date: 12/21/2015

Re: Public Hearing - Columbia Cosmopolitan Recreation Area Irrigation Improvements

Documents Included With This Agenda Item

Council memo

Supporting documentation includes: Maps

Executive Summary

Public hearing for the Columbia Cosmopolitan Recreation Area irrigation improvements. Improvements to the irrigation system will include the replacement of the 32-year old irrigation pump system and irrigation lake improvements to increase the lake's holding capacity. The pump system supplies water to 22 athletic fields within Cosmo Park and the irrigation lake is the sole source for water for the athletic fields. The project is identified in the City's FY-2016 CIP with a total project budget of \$90,000. The funding comes from the Department's Recreation Services User Fee fund. The project will be bid through the City's Purchasing Department and will be completed using contract labor. Construction is expected to begin this winter, with an estimated completion date of late spring 2016.

Discussion

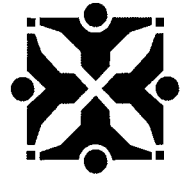
Columbia Cosmopolitan Recreation Area, located at 1615 Business Loop 70 West, encompasses 533 acres and includes 39 athletic fields among the amenities offered within the park. The athletic fields are utilized for baseball, softball, soccer, lacrosse, football and ultimate frisbee games. The fields are active from March until November each season and are rented by user groups, schools, and individuals.

The improvements include the replacement of the 32-year old irrigation pump system and the dredging and enlargement of the 2.4-acre irrigation lake located north of Rainbow Softball Center.

In October 2015, park staff (planners, construction and sports turf staff) met to discuss potential improvements to the irrigation system to upgrade the existing pump station, increase available irrigation water and improve the overall efficiency of the Cosmo Park irrigation system. Staff gathered necessary information related to the current system and the recommendation agreed upon by the group was to replace the existing pump station and renovate the existing irrigation lake with the available funds. After the initial park staff meeting, the improvements were introduced to the Parks &

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Recreation Commission at their November 19, 2015 meeting. After discussion of the project, the Commissioners approved the plans for the irrigation improvements at Cosmo Park.

The improvements to the irrigation system at Columbia Cosmopolitan Recreation Area will include the replacement of the 32-year old irrigation pump station. The existing pump station has experienced multiple electrical issues over the past five years resulting in pump failures and costly equipment repairs and replacement. The existing pump station has also reached its capacity in terms of pumping water so irrigating athletic fields in the park must start by 10:00 pm and the system is not finished watering until approximately 7:00 am each day. A new irrigation pump station will be sized to handle our current irrigation system and allow us to add irrigation on additional athletic fields in the future. Staff anticipates adding irrigation to four of the baseball/softball fields at Antimi as a 2015 Park Sales Tax project. By increasing the pump size during the replacement of the system, we will also be able to shorten our window for watering all fields. This improvement will lower our utility costs as we will be able to irrigate all fields in a much shorter window of time. A new pump station will also allow for better monitoring of water usage through improved water tracking and reporting capabilities. The replacement of the pump station will be completed using contract labor.

Improvements to the 2.4-acre irrigation lake located adjacent to the pump station will include dredging and enlarging the existing lake to increase the total holding capacity. All athletic fields at Cosmo Park are irrigated using this lake as the water source, so increasing the capacity of the lake will be beneficial for storage. The lake water is supplemented by a deep well on park property that is also utilized by LA Nickell Golf Course. The use of lake water and the deep well allows the department to avoid using City water and the costs associated with the usage. Increasing the size of the lake will also allow for park staff to continue to add in-ground irrigation to athletic fields without concerns over available water. The lake also serves as a key stormwater feature as it collects runoff from adjacent soccer fields and Rainbow Softball Center. The irrigation lake improvements will be completed using contract labor.

The irrigation improvements at Cosmo Park are included in the City's FY-16 Capital Improvement Program budget, with site construction scheduled to begin winter 2016. The total project budget is \$90,000 and is funded by the Recreation Services User Fee Fund. Staff anticipates that the improvements will be completed by late spring 2016. All work and materials will be bid through the City's Purchasing Department and will be completed using contract labor.

Fiscal Impact

Short-Term Impact: The total project budget is \$90,000 and is funded by the Recreation Services User Fee Fund.

Long-Term Impact: Once the improvements are completed, staff anticipates slightly lower utility costs for the pump station due to improved pump efficiency and shorter run times for irrigation cycles.

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Vision, Strategic & Comprehensive Plan Impact

Vision Impact: Parks, Recreation and Greenways

Strategic Plan Impact: Not Applicable

Comprehensive Plan Impact: Environmental Management, Infrastructure

Suggested Council Action

Hold public hearing for Columbia Cosmopolitan Recreation Area irrigation improvement project. After public hearing, approve the ordinance authorizing the project to proceed.

Legislative History

None


Department Approved


City Manager Approved



SUPPORTING DOCUMENTS INCLUDED WITH THIS AGENDA ITEM ARE AS FOLLOWS:

Maps

Resolutions

COLUMBIA COSMO RECREATION AREA IRRIGATION IMPROVEMENTS

12/7/2015



IRRIGATION POND IMPROVEMENTS

COSMO PARK BOUNDARY

IRRIGATION PUMP STATION REPLACEMENT