



CITY OF COSTA MESA

Agenda Report

File #: 23-1365 Meeting Date: 9/14/2023

TITLE:

DESIGN FOR THE IMPROVEMENTS TO THE TEWINKLE LAKE SYSTEM

DEPARTMENT: PUBLIC WORKS DEPARTMENT/MAINTENANCE SERVICES DIVISION

PRESENTED BY: RAJA SETHURAMAN, PUBLIC WORKS DIRECTOR

CONTACT INFORMATION: ROBERT RYAN, MAINTENANCE SERVICES MANAGER (714)

327-7499

RECOMMENDATION:

Staff is providing an update on the project and seeking input on the final design plans of the TeWinkle Lake system.

BACKGROUND:

TeWinkle Park is a 49-acre park dedicated in 1965 in honor of the first Mayor of the City of Costa Mesa, Charles TeWinkle. The TeWinkle Park Lakes are artificial water features consisting of two (2) lakes, two (2) ponds, an intermediate pond, five (5) streams, nearly two (2) acres of water surface, and approximately 3,250 feet of shoreline. A partial renovation of the lakes was undertaken in 2004. Over the past several years, water leakage has developed in the two primary lakes, resulting in significant water loss, as well as undermining of the lake bed and surrounding soil areas.

The intermediate pond, along with dual streams, was not constructed during the prior renovation and lacked waterproofing. In addition, staff has observed excess water percolation and infiltration losses into the soil below and around the lakes. Pumps, the gravel bed, biological filter, as well as the aeration systems, have been non-functioning and are in need of repair. The water quality of the lakes has also been compromised due to excess nutrient input.

At their regularly scheduled meeting on December 7, 2021, the City Council approved an agreement between the City and Pacific Advanced Civil Engineering (PACE). PACE prepared the Assessment Report and initial concepts and presented to the Parks and Community Services Commission during their regularly scheduled meeting on July 28, 2022. Additionally, the Public Works Department solicited feedback from the community, through social media, via telephone or an email address dedicated to the project.

ANALYSIS:

PACE has completed the final design (Attachment 1). All of the key findings from the initial report have been addressed including:

File #: 23-1365 Meeting Date: 9/14/2023

- Replacement of the lake liner to minimize water loss through seepage.
- Replacement of the damaged shorelines and redesigning of the lake edges to improve water movement, shoreline access and landscape.
- Upgrades to the lake system to improve water clarity and appearance.
- Addition of landscape improvements to encourage waterfowl to designated areas to minimize waste on sidewalks and other usable park areas.

City staff has reviewed and accepted the final design. In addition, final design plans were reviewed and approved by an outside consultant who specializes in water features and lake design.

Over the next few months, staff will be soliciting construction proposals and working through the contract award process. Construction is anticipated to begin in mid to late 2024.

Staff requests the Parks and Community Services Commission to provide any further comments on the final design before the bid solicitation phase.

ALTERNATIVES:

There are no alternatives suggested for this item.

FISCAL REVIEW:

Funding for the design was included in the FY 2019-2020 and FY 2020-2021 budgets. Funding in the amount of \$2 Million for the construction phase is included in the FY 2023-24 budget. This project is one of several projects that were included in the \$10 million state grant received through Senator Dave Min.

LEGAL REVIEW:

Legal review is not required for this item.

CONCLUSION:

Staff is providing an update on the project and seeking input on the final design plans of the TeWinkle Lake system.