



STAFF REPORT

DATE: January 5, 2021
TO: Kent Cagle, City Manager
FROM: Joe Brown, Executive Director of Recreation Services
SUBJECT: Solar LED Lighting for Hike & Bike Trails and Dog Park

BACKGROUND AND FINDINGS:

Recreation Services (RS) is seeking to replace sixty (60) metal halide bulb lights at the Fort Hood Regional Trail (FHRT) and install thirty (30) new light fixtures at the Conder Park Trail. The FHRT was obtained by RS in 2017, at which time electric light poles were installed. Since then, vandals have repeatedly removed the copper wiring from the light poles, making the lights inoperable, thus unsafe for citizens utilizing the trail. Additionally, RS must spend operating budget funds and utilize staff resources to repair the damages for each vandalism occurrence. In this project, the existing poles will be utilized; however, wiring will be removed, and the solar LED light fixture will be added. Replacing the electric lights with solar LED lights will also be more cost efficient. The City currently spends \$4,380 annually in electric utility costs. With solar LED lighting, the City of Killeen will save on this expense, while eliminating the cost of repairs due to vandalism.

The Conder Park Trail has been a part the City of Killeen parks system for over twenty (20) years. The current trail, however, is constructed of crushed granite, with numerous washouts, and limited lighting within the park. RS is currently working on a project to renovate the trail using Community Development Block Grant (CDBG) funding. The new trail will consist of 8-foot wide, rebar-reinforced concrete. RS will install thirty (30) new light poles along this updated trail. The installation will include an anchor base, base cover, light pole, and the solar LED light panel.

RS is also seeking to add eight (8) new light fixtures within Mickey's Dog Park. Mickey's Dog Park was established on June 10, 2015 and currently has no lighting within the park. Adding this LED Solar light system within the dog park will allow park users to utilize this space well into the hours of darkness safely. Four (4) poles will be added with eight (8) lights (2 lights per pole). RS will install new light poles, anchor base, base cover, and the smart solar LED light panel.

At both trails and dog park, the All-in-One Smart Solar LED light panel will include a 5-year warranty. The all-in-one system includes the integrated solar panel, LED light, battery, battery charger, and motion sensor controls. There is no power or wiring required, limiting vandals from stealing or damaging wires. The bright LED light includes motion sensors, with instant on/off capabilities. There is no flickering or buzzing, and the lights will create a brighter, safer environment for citizens utilizing the trails and dog park.

THE ALTERNATIVES CONSIDERED:

Option 1 - Do not approve the purchase of the solar LED lights

Option 2 - Approve the purchase of the solar LED lights

Which alternative is recommended? Why?

Recreation Services staff recommends City Council approve the purchase of the solar LED lights for both trails and the dog park from JEC Energy Solutions through Texas Buyboard contract #628-20. The new light system is energy efficient, vandal resistant, and safer for the citizens who utilize the trails and dog park. Funds were approved and are available this fiscal year, from the approved FY21 CIP list. From the date of ordering the lights, the process of having these new lights installed is approximately eight-ten (8-10) weeks (4-6 weeks for delivery, and 2-4 weeks for installation). The purchase will include the cost of the solar LED light systems, labor, and installation for both trails and the purchase of the solar LED light system for the dog park to be installed by City staff.

CONFORMITY TO CITY POLICY:

JEC Energy Solutions is a member of the Texas BuyBoard Purchasing Cooperative. Purchases made through a cooperative contract satisfies the state competitive bidding requirements as stated in Texas Local Government Code section 271.102, subchapter F; a local government that purchases goods or services under this subchapter satisfies any state law requiring the local government to seek competitive bids for the purchase of the goods or services.

FINANCIAL IMPACT:

What is the amount of the expenditure in the current fiscal year? For future years?

Expenditure in FY 2021 would be \$235,044, which includes the purchase, installation of trail lights and a 5-year warranty. Maintenance of lights will be incorporated into the maintenance budget.

Is this a one-time or recurring expenditure?

One-time expenditure of \$235,044. Recurring maintenance expenditures over the life of the lights will be built into the maintenance budget.

Is this expenditure budgeted?

Yes, \$235,044 is currently budgeted in account 349-8930-493.60-08. \$225,000 was adopted as part of the FY 2021 Capital Improvement Program (CIP) for the trail lights and the additional \$10,044 was available from savings on other CIP projects.

If not, where will the money come from?

N/A

Is there a sufficient amount in the budgeted line-item for this expenditure?

Yes

RECOMMENDATION:

Recreation Services staff recommends City Council approve the purchase of the solar LED lights for both trails and dog park from JEC Energy Solutions in the amount of \$235,044 in FY21 and that the City Manager or designee be authorized to execute any change orders as permitted by state and local law.

DEPARTMENTAL CLEARANCES:

Legal
Purchasing
Finance

ATTACHED SUPPORTING DOCUMENTS:

Quotes
Certificate of Interested Parties