



City of Grand Island

Tuesday, December 14, 2021

Council Session

Item G-13

#2021-350 - Approving Purchase of Trojan Items for UV System at the Wastewater Treatment Plant

Staff Contact: John Collins, P.E. - Public Works Director

Council Agenda Memo

From: Matt Walker PE, Assistant Public Works Director of Wastewater

Meeting: December 14, 2021

Subject: Approving Purchase of Trojan Technologies Items for UV System at the Wastewater Treatment Plant

Presenter(s): John Collins PE, Public Works Director

Background

The City of Grand Island Wastewater Treatment Plant Ultraviolet (UV) disinfection system is a Trojan UV3000 Plus. In the system, there are a total of four (4) UV banks, which disinfect effluent water. This system was installed in 2004 and is in need of updating to a self-cleaning system. Updating the system requires replacement of the drive cylinder, cleaning canisters and drive bar mechanism, for each of the four (4) banks. Wastewater Division staff plan to do one (1) bank per year over the next three (3) years to complete the updates.

During Fiscal Year 2021 one (1) bank was updated for a cost of \$38,581.75.

Discussion

The City of Grand Island is required to meet State mandated disinfection standards for treated effluent discharged from the Wastewater Treatment Plant each year from May through September. The City UV disinfection system is a Trojan UV3000 Plus which uses UV disinfection lamps to inactivate pathogens, such as *E. coli*, before discharging the effluent.

On January 12, 2021, via Resolution No. 2021-8, City Council approved MC² Inc. of Omaha, Nebraska as the sole source provider for Trojan Technologies UV parts, materials, and service.

In order to update the second UV bank City Council approval is necessary, as the estimated amount is over the \$30,000.00 purchase authority for Administration. At this time, the cost to provide updates to the second bank of the system is estimated at \$50,119.37 plus freight.

Alternatives

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue

Recommendation

City Administration recommends that the Council pass a resolution approving the purchase of Trojan Technologies UV parts and materials for updates to the second UV bank from MC² Inc. in the amount of \$50,119.37 plus freight.

Sample Motion

Move to approve the resolution.



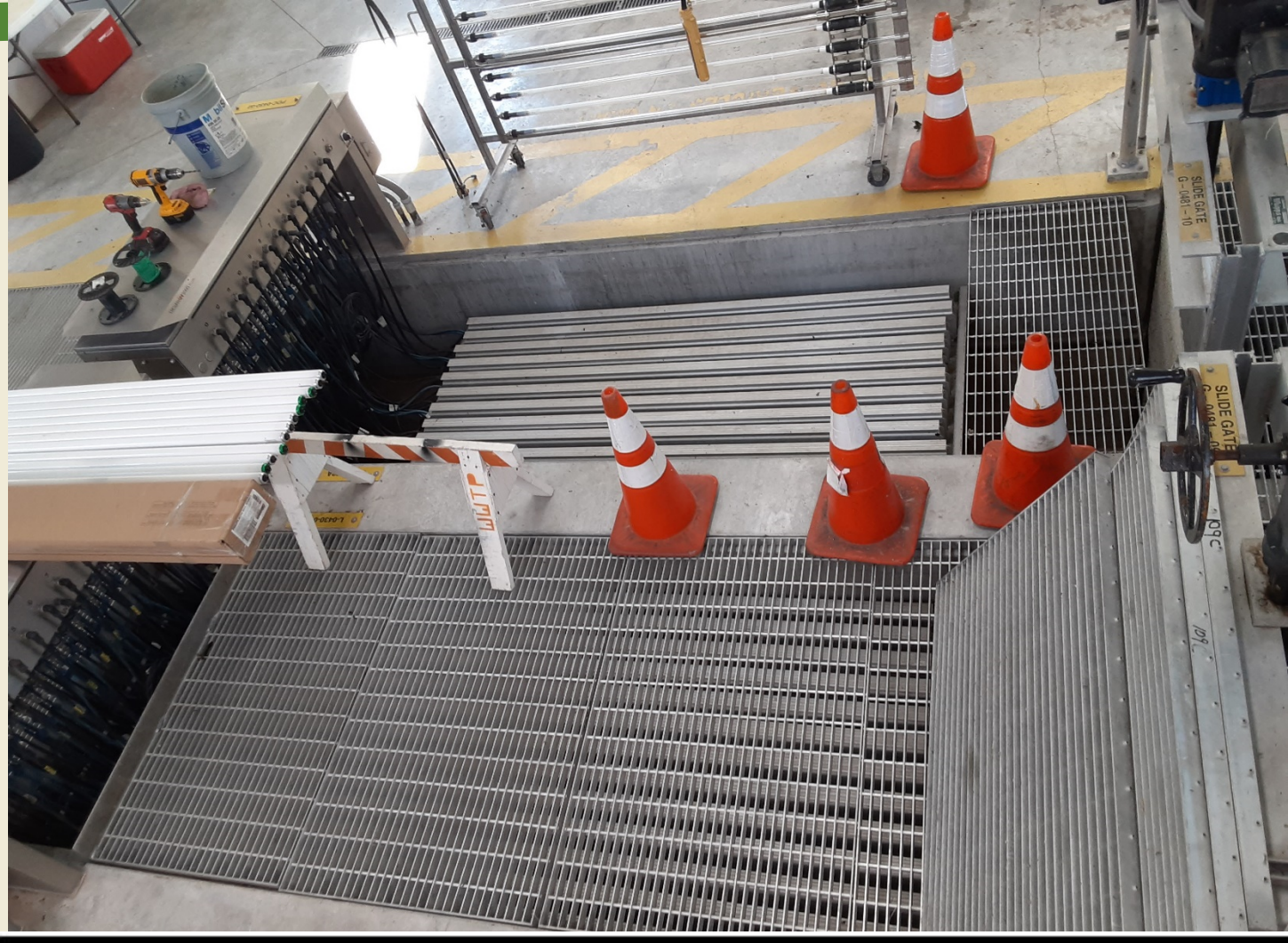
















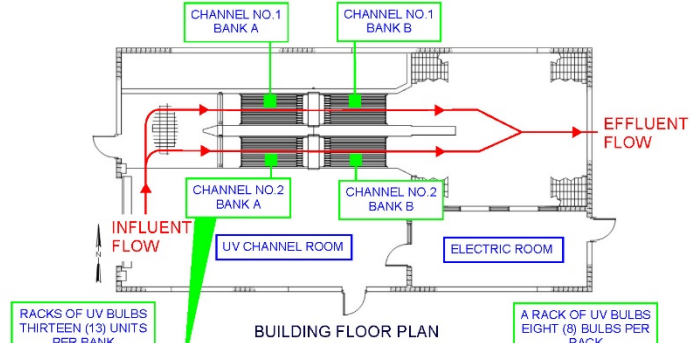








GRAND ISLAND WASTEWATER TREATMENT PLANT
 UV DISINFECTION SYSTEM
 PROJECT 2004-WWTP-1



RACKS OF UV BULBS THIRTEEN (13) UNITS PER BANK



CHANNEL NO. 2 - BANK A

A RACK OF UV BULBS EIGHT (8) BULBS PER RACK

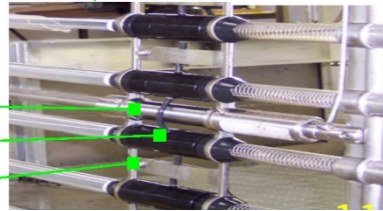


RACK NO. 13

UV BULB CLEANING SYSTEM

CLEANING SYSTEM COMPOSED OF:

- DRIVE CYLINDER
- CLEANING CANISTERS
- DRIVE BAR MECHANISM



RESOLUTION 2021-350

WHEREAS, the City of Grand Island Wastewater Treatment Plant (WWTP) uses a Trojan Technologies UV disinfection system at the plant; and

WHEREAS, on January 12, 2021, via Resolution No. 2021-8, City Council approved MC² Inc. of Omaha, Nebraska as the sole source provider for Trojan Technologies UV parts, materials, and service; and

WHEREAS, in order to update the second UV bank City Council approval is necessary, as the estimated amount is over the \$30,000.00 purchase authority for Administration; and

WHEREAS, at this time the cost to provide the updates to the self-cleaning system are estimated at \$50,119.37 plus freight.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the purchase of Trojan Technologies UV parts and materials for updates to the second UV bank from MC² Inc. in the amount of \$50,119.37 plus freight is hereby approved.

Adopted by the City Council of the City of Grand Island, Nebraska, December 14, 2021.

Roger G. Steele, Mayor

Attest:

RaNae Edwards, City Clerk

Approved as to Form	☐ _____
December 22, 2021	☐ City Attorney