



# City of Grand Island

Tuesday, January 10, 2023

Council Session

## Item G-14

**#2023-12 - Approving Purchase of Trojan Technologies Items for UV System at the Wastewater Treatment Plant**

Staff Contact: Keith Kurz PE, Interim Public Works Director

# **Council Agenda Memo**

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

**Meeting:** January 10, 2023

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

**Presenter(s):** Keith Kurz PE, Interim 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. Fiscal Year 2022 consisted of the second bank update for a cost of \$50,119.37.

## **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 MC<sup>2</sup> Inc. of Omaha, Nebraska as the sole source provider for Trojan Technologies UV parts, materials, and service.

In order to update the third 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 third bank of the system is estimated at \$48,072.16 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 third UV bank from MC<sup>2</sup> Inc. in the amount of \$48,072.16 plus freight.

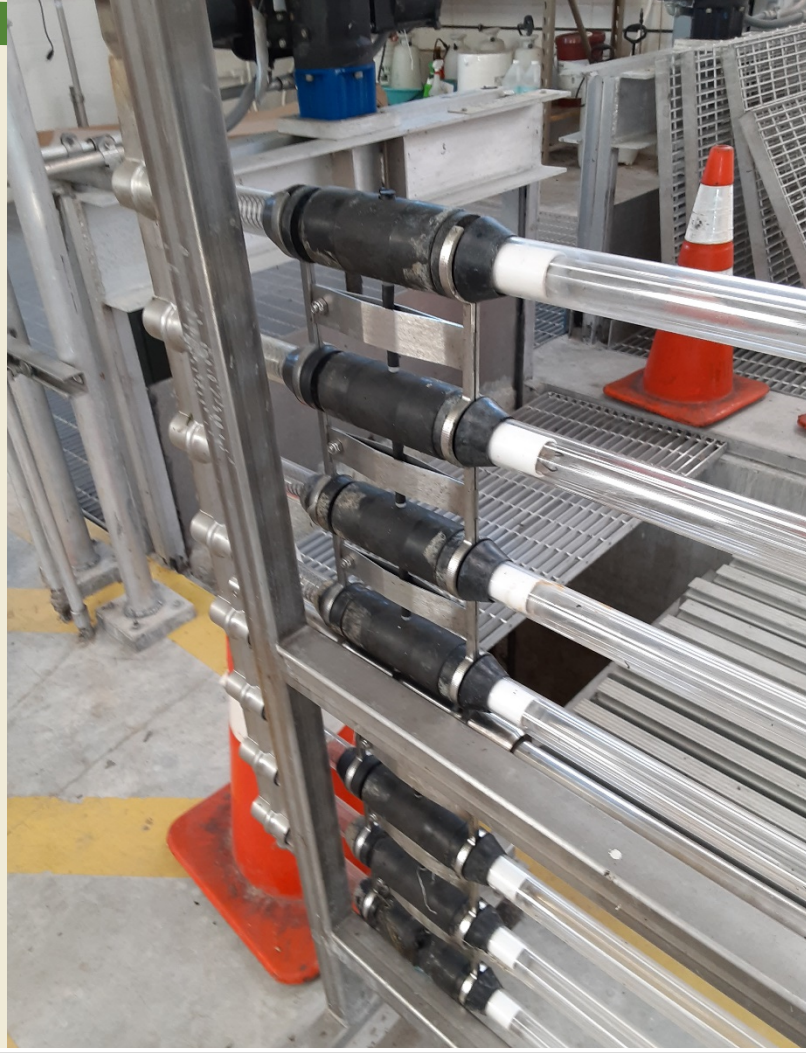
## **Sample Motion**

Move to approve the resolution for the purchase of Trojan Technologies UV parts and materials for updates to the third UV bank from MC<sup>2</sup> Inc. in the amount of \$48,072.16 plus freight.































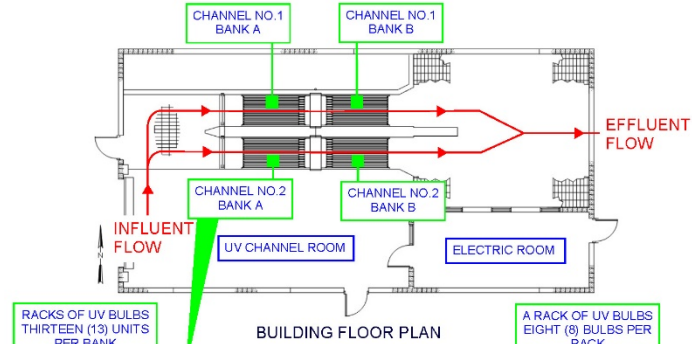








GRAND ISLAND WASTEWATER TREATMENT PLANT  
UV DISINFECTION SYSTEM  
PROJECT 2004-VVWTP-1



CHANNEL NO. 2 - BANK A

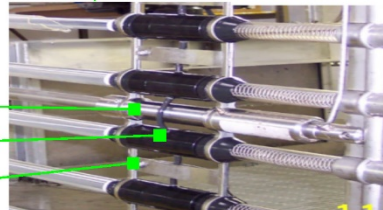


RACK NO. 13

UV BULB  
CLEANING  
SYSTEM

CLEANING SYSTEM  
COMPOSED OF:

- DRIVE CYLINDER
- CLEANING CANISTERS
- DRIVE BAR MECHANISM



RESOLUTION 2023-12

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 MC<sup>2</sup> Inc. of Omaha, Nebraska as the sole source provider for Trojan Technologies UV parts, materials, and service; and

WHEREAS, in order to update the third 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 \$48,072.16 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 third UV bank from MC<sup>2</sup> Inc. in the amount of \$48,072.16 plus freight is hereby approved.

BE IT FURTHER RESOLVED, that the Mayor and designees are hereby authorized to take all actions necessary to effect the purpose of this resolution.

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Adopted by the City Council of the City of Grand Island, Nebraska, January 10, 2023.

\_\_\_\_\_  
Roger G. Steele, Mayor

Attest:

\_\_\_\_\_  
RaNae Edwards, City Clerk

Approved as to Form	☐ _____
January 5, 2023	☐ City Attorney