



## Legislation Details (With Text)

**File #:** 18-2304      **Name:** AUTHORIZATION TO AWARD A TASK ORDER, TO PROVIDE ENGINEERING CONSULTING SERVICES, FOR THE REPLACEMENT OF PROGRAMMABLE LOGIC CONTROLLERS (PLC) AT THE WATER RECLAMATION FACILITY

**Type:** Purchasing/Contract

**In control:** Village Council

**On agenda:** 1/8/2019

**Final action:**

**Title:** AUTHORIZATION TO AWARD A TASK ORDER, TO PROVIDE ENGINEERING CONSULTING SERVICES, FOR THE REPLACEMENT OF PROGRAMMABLE LOGIC CONTROLLERS (PLC) AT THE WATER RECLAMATION FACILITY

**REQUEST:** Authorization to approve a task order to Hillers Electrical Engineering, Inc. to provide engineering consulting services to design the replacement of the Programmable Logic Controllers (PLC), at the Water Reclamation Facility, in the amount of \$128,346.00.

### Code sections:

**Attachments:** 1. 1. Hillers Proposal, 2. 2. 09.10.18 Report Hillers WRF PLC Replacement

Date	Ver.	Action By	Action	Result
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**ITEM:** AUTHORIZATION TO AWARD A TASK ORDER, TO PROVIDE ENGINEERING CONSULTING SERVICES, FOR THE REPLACEMENT OF PROGRAMMABLE LOGIC CONTROLLERS (PLC) AT THE WATER RECLAMATION FACILITY

**REQUEST:** Authorization to approve a task order to Hillers Electrical Engineering, Inc. to provide engineering consulting services to design the replacement of the Programmable Logic Controllers (PLC), at the Water Reclamation Facility, in the amount of \$128,346.00.

**EXPLANATION:** On August 8, 2017, Council awarded an engineering services contract (004-17/DZ) to multiple vendors. As part of the solicitation, Hillers Electrical Engineering, Inc. was selected as one of the Village's engineering service providers.

The Village Water Reclamation Facility (WRF) operates 24 hours a day, 7 days a week and is staffed with a minimum of two (2) operators on each shift. Programmable Logic Controllers (PLCs) are computers that are programmed with specific control language to allow for automated process control. The WRF utilizes PLCs to: 1) reduce man-hours dedicated to repetitive operational monitoring tasks; 2) ensure plant operations performance metrics are achieved; 3) ensure equipment safety; and 4) monitor and reduce facility chemical and energy costs. The WRF is equipped with 11 PLCs that monitor and control all of the plan processes including the headworks, aeration basins, clarifiers, digesters, blower system, solids handling system, dryer system and all chemical dosing systems including sodium hypochlorite, lime and polymer.

The existing PLCs are made by Allen Bradley. One of the PLCs is approximately 25 years old and is discontinued, meaning parts are no longer available. The remaining 10 PLCs are between 8 and 13 years old and are considered "Active Mature Products" which are supported, but will be phased out over the next five years. Additionally, a number of modifications to the control system have occurred over time that have resulted

in a significant amount of spare wiring, and excess programming code, which make troubleshooting and repair inefficient and time consuming.

Hillers Electrical recently completed a Replacement Study which recommended replacement and provided an opinion of cost. The 2019 approved Utility Capital Improvement Plan establishes a design and construction budget of \$1,675,000 for this project. Hillers Electrical is well qualified to perform this work.

Staff is seeking authorization to utilize such contract with Hillers Electrical Engineering, Inc. to provide engineering consulting services to design the replacement of the PLCs at the Water Reclamation Facility.

Staff recommends awarding a task order to Hillers Electrical Engineering, Inc. to provide engineering consulting services to replace the PLC at the Water Reclamation Facility at a cost of \$128,346.00.

**BUDGET AMENDMENT REQUIRED:** NO

**PUBLIC HEARING:** NO                      **QUASI-JUDICIAL:**

**FIRST READING:**                      **SECOND READING:**

**LEGAL SUFFICIENCY:** YES

**FISCAL IMPACT:** Funds for this project are available in the Water Reclamation Facility Capital Project 401 -7050-536.65-10, Project 201904.

**WELLINGTON FUNDAMENTAL:** Responsive Government

**RECOMMENDATION:** Authorization to approve a task order to Hillers Electrical Engineering, Inc. to provide engineering consulting services to replace the Programmable Logic Controllers (PLC) at the Water Reclamation Facility in the amount of \$128,346.00.