



## Agenda Item Summary

---

**File #:** RES 17-661, **Version:** 1

---

### **Submitted By**

John P. Wielebnicki, Director of Public Works

### **Reviewed By**

CLP

### **Agenda Item Title**

**A Resolution Approving a Professional Services Agreement with Ciorba Group Inc. for a Pump Station Energy Study in an Amount not to Exceed \$27,804.00 and Authorizing its Execution**

### **Overview**

The Department of Public Works solicited a Request for Proposals in June, 2017 for a Water Pumping Station Energy Study. The goal of the study is to determine if the existing facilities operate with optimized energy consumption, review the existing operating components in the stations to determine their remaining useful life as well as if they meet current technology and to review future demand as it relates to the existing operating equipment.

### **Staff Recommendation**

Approve the Resolution.

### **Fiscal Impact**

This project would be funded through the FY 2017 Water & Sewer fund, Capital Improvements, account no. 5040-43730-776-570707 which provides \$27,000.00 for the pump station energy study audit. The additional \$804.00 will come from the same account from unspent funds from other projects.

### **Background**

Request for Proposals were sent to six consulting engineering firms. Four proposals were received. After careful review of the four proposals submitted and their associated costs, the scope of the project was reevaluated and was short listed to two proposals to better match the budgeted amount for this pump station project.

The most responsive proposal was submitted by Ciorba Group Inc., in an amount of \$27,804.00. Ciorba has completed pump station and reservoir improvement engineering projects for the Village recently and they have shown they are a competent professional engineering firm. Staff recommends entering into an agreement with Ciorba Group Inc. to perform this energy study for the pump stations.

The Village purchases water from the City of Chicago. Delivery is made via four interconnects from the Chicago water main on Austin Boulevard. The Chicago supply water mains pass through meter vaults whereby the water is measured for billing purposes. After the water passes through the Chicago meter vaults it is then

delivered to the Village's four underground reservoirs where it is then pumped into the distribution system.

The Central Pump Station was originally constructed in 1925. The most recent remodeling of the Central Station occurred in 1998. The North and South Pump Stations were constructed in the early 1960's, and remodeled in 2004.

By performing a pump station energy study, the Village will have a critical operational analysis to review and analyze the overall age of the critical major components (pumps, motors and variable frequency drives) of the pump stations in relation to their useful life expectancy, also to examine the current electrical energy usage of the existing pump motors and controls to determine if they are sized properly for current needs and future water demands through a 30-year planning horizon. Electricity is one of the largest expenses at the pump stations, not including the purchase of water. This study will also assist the Village in capital improvement planning by developing budgetary costs information for future needs and system update requirements.

#### **Alternatives**

The Board can delay action to gain additional information.

#### **Previous Board Action**

None.

#### **Citizen Advisory Commission Action**

N/A.

#### **Anticipated Future Actions/Commitments**

Recommendations from this study may be considered for inclusion into the Village's Capital Improvement Program.

#### **Intergovernmental Cooperation Opportunities**

None at this time.

#### **Performance Management (MAP) Alignment**

This work is in alignment with the Governance Priority for the Department of Public Works for Infrastructure/Capital Programs.