

## MEMORANDUM # M17-143

TO: Building & Grounds Committee  
FROM: Dean R. Bostrom, Executive Director  
Craig Talsma, Deputy Director/Dir A&F  
Dustin Hugen, Director of Park & Facilities Services  
SUBJECT: **Seascape Family Aquatic Center Filtration Systems**  
DATE: December 7, 2017

---

### **Background**

Staff has identified that the current (original) Sand Filter System at Seascape Family Aquatic Center is corroded to the point that they do not hold sand to properly filter the water. Staff enlisted the services of Jim Lueders of Innovative Aquatic Design to design the new filtration system and aid in preparing the bid documents.

Through conversations with Jim it was determined that the District would be better served by upgrading the entire filtration system to with new pumps, piping, electrical and chlorinators, instead of repairing a portion of the system that is outdated. Our current filtration systems are called High Rate Sand Filters, the sand is the medium that catches the particles and impurities in the water. When the particles build up, a backwash is required. To backwash you reverse the flow of the water and force it backwards with water coming out of a 6 inch diameter pipe through the sand to loosen up the sand and to flush the filtered particles to waste water.

### **Implications**

The latest in swimming pool sanitation is the Regenerative Media Filtration systems which utilize zoned chlorinators. They benefits include much less water usage, less chemical usage, reduced heating costs, and substantially clearer water. The new filtration system has a life expectancy of 20 years (warranty of 10 years). After conducting research into the new filtration systems staff is also proposing new mechanical systems including piping, circulation pumps, filters, chlorinators and electrical to ensure the effectiveness of the entire system.

With the information staff obtained and Innovative Aquatic Design's specifications we went out to bid for a completely new filtration systems that can be zoned into multiple section at Seascape Family Aquatic Center. The bid package was sent directly to six contractors with two sealed bids turned in that were publically opened and read on December 4th at 10:30am. The bid results are as follows:

SFAC Sand Filters 12/4/17 @ 10:30 am	Schaeffges Brothers, Inc. 851 Seton Ct Suite 2A Wheeling, IL 60090	Aqua Pure Enterprises, Inc. 1404 Joliet Rd Romeoville, IL 60446
Bid Bond	5% of total bid	no bid bond
Demo & Removal of existing material	\$27,000.00	\$74,512.00
Required Material	\$374,475.00	\$377,177.50
Alternate	\$18,075.00	\$36,325.38
Required Permits, etc.	\$4,050.00	\$7,096.00
Installation	\$106,475.00	\$102,400.00

The apparat low bidder is Schaeffges Brothers in the amount of \$530,075.00. Staff checked references which were all positive and Jim at Innovative Aquatic Design verified that they are a good contractor and capable of performing the specified work.

Included in the 2018 budget in the Capital Fund 12 was \$350,000 for the Seascap sand filter replacement; also budgeted in the Recreation Fund was \$32,000 for a pump and pump motor. These would all be part of this replacement. As this expense is within the Recreation Fund's operations it is a viable usage of our Recreation Fund Balance reserves. The 2018 Budget will be updated (prior to final approval) to reflect the cost of this project as a Recreation Fund capital project.

### **Recommendations**

Staff recommends that the Recreation Committee recommend to the full Board, approval of awarding a contract to install the new filtration system at Seascap Family Aquatic Center to Schaeffges Brothers in an amount not to exceed \$530,075.