Legislation Details (With Text)

File #:	2018-0129	**Version:**	1	**Name:**	Elevated Tank #5 Rehabilitation Engineering - Proposals
Type:	MOTION			**Status:**	PASSED
File created:	1/10/2018			**In control:**	Board of Trustees
On agenda:	2/5/2018			**Final action:**	2/5/2018
Title:	Elevated Tank #5 Rehabilitation Engineering - Proposals				
Code sections:					
Attachments:	1. Strand & Associates Proposal, 2. Contract - Signed				

Date	Ver.	Action By	Action	Result
2/5/2018	1	Board of Trustees		
1/23/2018	1	Public Works Department	INTRODUCED TO BOARD	
1/15/2018	0	Public Works Committee	RECOMMENDED FOR APPROVAL	Pass
1/10/2018	0	Public Works Department	INTRODUCED TO COMMITTEE	

Title
Elevated Tank #5 Rehabilitation Engineering - Proposals

History
The Village of Orland Park requested proposals from qualified engineering firms to perform an evaluation of Elevated Tank #5 and provide recommendations and oversight for upgrades and paint restoration. Elevated Tank #5 is a spheroid style tank with 300,000 gallon total capacity, located at the intersection of Harlem Avenue and Wheeler Drive. It was built in 1971 by Chicago Bridge and Iron Works (CBI) during the development of the Catalina Subdivision to meet the growing needs of the community. It was last painted in 1999 after a complete blast to bare metal for both interior and exterior surfaces. Based on location and previous inspection reports completed by Pittsburg Tank & Tower in 2015, it was decided Tank #5 would be the first of seven elevated tanks to receive improvements.

It was the expectation of Public Works that the selected firm will include the following in their proposal price:
- a thorough evaluation of the tank noting deficiencies
- provide recommendations for improvements
- provide costs for improvements
- provide construction and rehabilitation schedule
- evaluate, recommend and provide a cost estimate for a combination railing and antenna mounting system
- separation of electrical services
- provide a minimum of three (3) exterior paint schemes incorporating the Village’s new logo and branding
- coordination and status meetings with village staff

Below are more detail of the improvements and oversight requested of the firms.

The top of Tank #5 currently has an antenna pod installed for a third party cellular array. Constructed in 2000 by VoiceStream (now T-Mobile) the pod supports T-Mobile's cellular flat panel array, a Public Works 900 MHz SCADA antenna, Public Works Radio repeater, Police Department Radio repeater and the Police Department data equipment. Additionally, the Village of Oak Lawn has a radio repeater mounted on a separate tripod facing northeast near the top of the Tank. As part of the rehabilitation a new railing and antenna mounting system is proposed for the top radius of the tank. The new railing system is multi-purpose providing additional fall protection for personnel, secure mounting attachments for existing antennas, provides mounting options for future carriers and equipment. The railing will create separation between existing antenna's preventing communication interference. The engineering firm will work with CBI when designing the railing system to ensure there is no compromise to personnel safety and tower integrity.

It will be the responsibility of the engineering firm to work with Village staff and coordinate the removal of all cellular, phone and radio equipment during the restoration process. The engineering firm will coordinate reinstallation of the communication equipment after all modifications and paint restorations are completed.

Within the bell (bottom portion of the tank) there is a very small room which is only able to house a portion of the electronic equipment for the Village-owned antennas and controls. The remaining equipment is in an unheated space, subject to temperature extremes. Current Village initiatives are exploring opportunities to incorporate new technologies inside the tank utilizing a combination of wireless and fiber optic technologies. The introduction of this technology would improve emergency communications, decrease dependence of outside carriers and provide network connectivity for electronic devices that will be utilized by staff daily, as paperless efforts are implemented. The rehabilitation will include converting the lower section of the tank (bell) into a favorable environment for supporting all electronic equipment. The engineering firm would develop a plan to maximize the available space and utilize cost effective and energy efficient solutions to control temperatures in the space under varying winter and summer conditions.

Currently, Tank #5 receives electric service through an adjacent former well house. The rehabilitation provides an opportunity, while the tower is out of service, to separate the electric service with a dedicated meter pedestal and disconnect switch. The current panel in the tower is at capacity. The new service will allow expansion to accommodate current and future needs. The addition of a natural gas/propane generator with automatic transfer switch is also proposed to support all existing Village equipment.

In 2016, the Village adopted a new logo developed through a branding process that can be seen throughout the community. The Engineering firm will provide up to three paint schemes consistent with the Villages new branding, soliciting input from Village Officials and staff. After final selection, the new logo will be incorporated into the new paint scheme for Tank #5 and will be duplicated as other elevated tanks in town are completed.

Proposals were received from Strand and Associates of Joliet, Illinois, for $47,600.00; Farnsworth Group of Bloomington, Illinois, for $104,414.72; Greeley and Hansen of Chicago Illinois, for $88,000.00 and Dixon Engineering of Hales Corners, Wisconsin, for $65,724.50. After interviews and a review of each of the proposals, staff recommends the proposal from Strand and Associates of Joliet, Illinois be accepted for a price not to exceed $47,600.00. Staff is currently working with Strand and Associates on the Water Distribution Model and is very confident in their abilities. An additional

contingency in the amount of $10,000 is also requested to address any unforeseen issues which might arise during this process.

On January 15, 2018, this item was reviewed by the Public Works Committee and recommended for approval and referred to the Village Board of Trustees for consideration.

Financial Impact
Funds for this project are available in the Utility Fund budget 031-6002-443900 (Well & Storage Facilities).

Recommended Action/Motion
I move to approve to accept the proposal from Strand and Associates of Joliet, Illinois for Elevated Tank #5 Rehabilitation Engineering for an amount not to exceed $57,600.00 ($47,600.00 plus $10,000 contingency).