



STAFF REPORT
ACTION ITEM

Item #11b

SUBJECT: Water Tower Renovation and Preventative Maintenance

DATE OF MEETING: January 23, 2018

STAFF CONTACTS: Dale E. Lehnig, PE, CFM, Interim Public Works Director

SUMMARY and RECOMMENDATIONS:

An inspection report in 2012 recommended that the interior and exterior of the water tank located near Loudoun Valley High School be renovated within one (1) to three (3) years. The Town, after soliciting proposals, executed a Council approved contract in October 2016 for the renovation and painting of the water tank and continued maintenance services. The cost includes renovation and painting of the interior and exterior of the Tower, as well as the installation of an antenna corral. The maintenance services include cleanout and inspection services, emergency services and repairs.

In the approved Town FY2018 budget, the first year this item was budgeted, the capital budget for the Water Tower Renovation was requested and approved at \$300,000. The RFP that was submitted proposed payment of the water tower renovation over 3 years, to include maintenance services.

The signed Contract provides for payments of \$171,173 for the first three (3) years of the Contract, with annual fees beginning in year four (4) of \$9,061 and increasing over the next six (6) years for routine inspection and maintenance services. Alternatively, if the work is completed as a lump sum cost, the total cost of the renovation is \$507,081 resulting in a budgeted shortfall of \$207,081. An estimated \$104,953 of this cost may be reimbursed to the Town from the cell carriers that currently lease space on the tower; if so, the total cost to the Town is reduced to \$402,128 and the budget deficit for the renovation and painting is decreased to \$102,128.

Staff recommends that the Town Council direct staff to add the additional funding necessary to the mid-year budget amendment.

BACKGROUND:

The elevated water storage tank at 311 N. Maple Avenue near Loudoun Valley High School is one of the Town's most important assets. It was constructed and placed into service in 1986.

Properly maintained water storage tanks may have a useful life of 75 to 100 years. The tank provides 200,000 gallons of storage to meet the demands of the community, and allows the Town to comply with regulatory storage requirements issued by the Virginia Department of Health. The tank also is a source of revenue to the Town through lease agreements with cell phone carriers. Since the water tower was placed into service, it has been painted in its entirety only once, whereas 'best practices' maintenance as proposed in the contract above is recommended at ten (10) to fifteen (15) year intervals by industry professionals dependent upon the characteristics of the water stored.

In 2012, Town Staff procured a contractor to wash out the interior bowl of the storage tank. Cleaning the interior of the tank is recommended every 3-5 years to remove buildup of sediment. The Contractor, Utility Service, also provided an inspection report of the tank, both of the interior and exterior. The report noted that the tank at that time was generally in good condition. However, based on the condition of the coatings and the thickness of the existing coating system in 2012, it was recommended that the renovation to the exterior and interior coating occurs within one (1) to three (3) years.

As a result of the inspection report, Town Staff recommended that the Town Council authorize the Town Manager to negotiate and execute a Contract with Utility Service Group to paint the elevated tank. On January 12, 2016, Town Council authorized \$300,000 for the Town Manager to do so. Due to procurement concerns, in May 2016 the Town requested proposals (RFP #WTP-2016-02) from qualified firms to renovate and provide preventative maintenance for the water storage tank. Proposals were due on June 10, 2016. In October 2016, a Contract Agreement was signed by the Town and Utility Service Co., Inc. for the work described in the proposal. A Notice of Award was issued on November 15, 2016 to Utility Service Company, Inc.

On October 31, 2017, letters were sent to the lease holders (cell carriers Cellco, Sprint, and T-Mobile) notifying them of the Town's plan to begin painting the water tower on or after May 15, 2018, and that their equipment would need to be temporarily removed (in accordance with the lease agreements).

Town Staff met with Utility Services on November 30, 2017, in order to get an update on the status of the tank renovation and painting. Utility Service representatives, stated that they would honor the cost as quoted in the proposal submitted in 2016 and the subsequent award. The proposal had provided an option to spread the costs of the renovation over several years, and also provided a preventative maintenance program for 10 years

thereafter. The terms of the contract and proposal provides for a means to spread the cost of the work over several years as follows:

- Maintenance program service spread & work schedule. Year 1, 2 & 3: \$171,173.00. Years 4-10: beginning cost \$9,061 and gradually increasing to \$11,164 in Year 10. This provides for washout inspection and emergency services every 3 years, and visual inspection and emergency services the other years of the contract.

It is important to note that this Service Contract includes painting as needed; the Town will not have another project cost of over \$500,000 under this contract.

Given the constraints of the \$300,000 budgeted for the tank renovation, Staff asked Utility Service, Inc. to provide the total cost for the renovation as a lump sum. Utility Services has stated that the costs for upfront renovation is:

- Upfront renovation costs, full balance due at the completion of the work. \$367,144 (renovation) + \$139,937 (antenna corral). Maintenance costs beginning in Year 2 \$9,061.00.

A corral and antenna retrofit is recommended that will allow for future renovations to occur without disruption to the carriers operations as well as municipal antenna. The corral allows for safe roof access and rigging points for all carrier projects, as well as a better aesthetic appeal. It is believed that the Town could seek reimbursement from the carriers for the $\frac{3}{4}$ of cost of the corral (\$104,953); the Town's portion of the corral cost being \$34,984. The total project cost before reimbursement is \$507,081; after the anticipated carrier reimbursement to the Town, the cost is \$402,128.

In order to perform the proposed renovation, the tower will need to be out of service for up to eight (8) weeks. The maintenance program is offered to the Town at a first year rate of \$9,061, with slight increases in the following years. The maintenance program includes regular and systematic inspections, repairs, touch up, certain renovation components, and a number of other services to ensure coating and tank integrity will be scheduled as needed. This service would need to be budgeted as a part of the Water Plant operations budget.

Recently, Utility Services responded to an emergency call from Town Staff regarding an issue with the water storage tank. Since they are under Contract with the Town per the contract that was signed in October 2016, work that would ordinarily cost an estimated \$20,000 is covered as a part of the preventative maintenance part of the contract.

ISSUES:

The water storage tank is a critical component of the Town's water system. The 2012 inspection report noted that the exterior coating is beginning to break down and show signs of failure. Similarly, the interior coating systems are showing signs of coatings failure and flaking, with areas of blistering and corrosion evident. The report notes that the interior should be renovated to prevent further steel loss and pinhole leaks. The inspection report was completed in 2012, nearly six (6) years ago. The interior renovation work was recommended to be completed within one (1) year; the exterior within three (3) years. A recent issue with the water tower demonstrates the value of having an emergency on-call service under contract. As the tank ages, it is critical to maintain such a valuable component of the Town's infrastructure to prolong its useful life.

BUDGET IMPACT:

The FY2018 budget allocates \$300,000 for the water tower renovation. The impact to the budget with the Maintenance Program Service Spread is as follows:

Year 1: \$171,173

Year 2: \$171,173

Year 3: \$171,173

Years 4 – 10: beginning \$9,061, and increasing over the years to a maximum of \$11,164.

OR, with upfront renovation costs:

Exterior and interior paint, repairs and antenna corral \$507,081

Maintenance base fee beginning Year 2 \$11,073.

MOTION(S):

"I move that the Town Council authorize Staff and the Town Manager to move forward with the Contract under the terms of the Maintenance Program Service Spread. With \$300,000 already in the Town's CIP, budgeting for the following years is in the CIP is: FY2019 \$128,827, FY2020 \$171,173. The preventative maintenance program budget, under the Water Department operating expenses would begin as \$9,061 in Year 4 of the contract and increase through the next six fiscal years as shown in the response to RFP #WTP-2016-02."

OR

"I move that the Town Council authorize Staff and the Town Manager to move forward with requesting an additional \$207,081 to the Water Tank Renovation Capital Project, for a total appropriation of \$507,081. The additional appropriation will be presented to the Town Council for their approval as a part of the mid-year budget amendment in February 2018. The preventative maintenance program budget, under the Water Department operating

expenses would begin as \$9,061 in Year 2 of the contract and increase through the next six fiscal years.

ATTACHMENT(S):

None

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