



Date: September 17, 2019

To: Thomas J. Bonfield, City Manager
Through: W. Bowman Ferguson, Deputy City Manager
From: Jina B. Propst, Interim Director, General Services Department
Subject: Additional Construction Services with Cadet Construction Company at Valley Springs Park

Executive Summary

The General Services Department entered into a construction contract with Cadet Construction Company on February 13, 2019 for accessibility improvements at Valley Springs Park. The scope includes installation of a new sewer line and connection to the municipal sewer service due to a failed septic field. Additional improvements include a year-round accessible toilet room, accessible parking, accessible seating at existing bleachers, renovation of the existing restrooms, and sidewalk repairs.

The sewer line is 1043 feet long with half the length being installed prior to encountering unforeseen solid rock. Work has been temporarily put on hold, as the unforeseen and excessive rock removal cost estimates exceeded the project contingency and the construction contract requires additional funding authorization to proceed. A redesign of the sewer line will result in a shallower excavation and a lower construction change order cost than if the original design were constructed.

This requires a CIP ordinance amendment in the amount of \$200,000; however, the amendment is already addressed in this cycle by Budget & Management Services.

Recommendation

The General Services Department recommends that City Council:

To authorize the City Manager to negotiate and execute a change order to the construction contract with Cadet Construction Company for the Accessibility Improvements at Valley Springs Park project, for an amount of \$185,000;

To establish a contingency fund for the contract in the amount of \$40,000; and

To authorize the City Manager to negotiate and execute change orders to the construction contract provided the total project cost does not exceed \$756,250;

Background

On August 1, 2016, City Council authorized a professional services contract with Kimley-Horn and Associates, Inc. (Kimley-Horn) for the Accessibility Improvements at Valley Springs Park.

An investigation of potential options for connecting to the municipal sewer system was conducted, along with the possibility of repairing the failed septic system. A municipal sewer

connection is preferred when possible, due to the ongoing maintenance costs. Of the several sanitary sewer possible connection options, connection to the existing manhole in the land conservancy property at the rear of the park was the most desired. On September 22, 2017, City Council accepted a donation of the land conservancy property adjacent to Valley Springs Park, enabling the permitting of the planned sewer line.

On November 20, 2017, City Council authorized an amendment to the Kimley-Horn contract for the new sewer line design.

The General Services Department advertised and opened two bids on June 19, 2018 for construction of accessibility improvements at Valley Springs Park. Cadet Construction Company submitted the lowest responsive responsible bid for the base scope and alternates.

On December 3, 2018, City Council authorized a construction contract with Cadet Construction Company for \$465,074 plus \$66,176 in contingency for an amount not to exceed \$531,250. An additional \$30,000 remains in the CIP fund, but is not currently authorized for the construction contract.

The City issued a notice to proceed to Cadet Construction Company on March 4, 2019 for the project. Permitting, material submittals and ordering, demolition, and restroom renovations commenced. Work began on clearing for and installation of the new 1043 feet long sewer line on May 23, 2019. Work progressed for 473 feet, until solid rock was encountered on multiple occasions and the work was temporarily stopped by the City of Durham pending additional geo-technical investigation.

The 3rd party geo-technical firm estimated the remaining rock removal at approximately 47% of the total length of the sewer line. The design firm has issued a preliminary redesign of a shallower sewer line resulting in less rock excavation for budget cost planning. A final redesign is required for the modified sewer permit and to determine the final construction cost.

Issues and Analysis

The initial on-site septic system was installed when Valley Springs Park was built in 1989. The system required continuous maintenance and repair. The system has failed, and required pumping of the tanks in order to keep the restroom building open. The failed system required repairs just 5 years after initial construction. A notice-of-violation was received from the Department of Public Health. Portable toilets are rented each winter, as the park has year-round use and the restrooms were not designed with freeze protection. The portable toilets are a temporary solution, and have been in use since Fall 2018.

This project includes renovating the existing restrooms which will address repair and maintenance issues and will bring the restroom up to DPRs durability and vandal resistant standard. The addition of a renovated, accessible, year-round toilet room will eliminate the need to rent portable toilets in the winter. The installation of a connection to municipal sewer services will address the Department of Public Health violation. The timeline for project completion is January 2020.

Alternatives

The City could elect not to proceed with the increase to the construction contract for the completion of the sewer line connection to the municipal sanitary sewer system. Staff recommends against this alternative for several reasons. The construction of the new sewer line must be completed to address the notice of non-compliance from the Department of Public

Health. The contractor has installed half of the system and has the remaining manhole structure material for the septic system on site.

An alternative is to repair the on-site septic system in the wooded area next to the failed septic system. This is not recommended, but was investigated by City staff with both the Durham County Public Health Onsite Water Protection staff and a septic system design engineer. Although theoretically possible, both experts agreed that the best solution is always to connect to municipal sewer when possible. A repaired on-site septic field would require a new design and permitting from both the City and the County, resulting in additional time. Regular on-going quarterly maintenance and monitoring of the system, including pumps, tanks, electrical panels, sensors and grounds-keeping would be required.

Financial Impact

Funds for this project are currently budgeted and available as follows:

FUNDING SOURCES

Miscellaneous Debt	\$ 421,143.97
Limited Obligation Funds	\$ 102,042.05
Bank Line of Credit Revenue	\$ 38,374.87
Misc CIP Revenue	\$ 29,912.13
Bonds Premium	\$ 11,420.98
Half Penny for Parks General Fund	\$ 78,870.00
Miscellaneous Debt	\$ 200,000.00
Total Revenues	\$ 881,764.00

PROJECT COSTS

Original Construction Contract	\$ 465,074.00
Original Construction Contingencies	\$ 66,176.00
Change Order for Rock Excavation	\$ 185,000.00
New Construction Contingencies	\$ 15,000.00
Project Funds avail for add'l Contingency:	\$ 25,000.00
Professional Services Valley Springs Only	\$ 93,211.65
Permits, fees, misc.	\$ 37,302.35
Total Expenditures	\$ 881,764.00

EBOP Summary

This is a change order request that was not reviewed by the Equity & Inclusion Department for compliance with the Ordinance to Promote Equal Business Opportunities in City Contracting.

Attachments

Attachment A – MAP- Valley Springs Park

Attachment B – Change Order #4 to Cadet Construction Contract #16026