

Should this item be pulled from the Consent Agenda the following motion is suggested:

POSSIBLE MOTION

I MOVE TO award a professional services contract to PND Engineers, Inc. for the design of the Landfill and Crescent Lift Stations Improvement Project on a time and materials basis for a not to exceed amount of \$139,534.

MEMORANDUM

To: Mayor McConnell and Assembly Members
Mark Gorman, Municipal Administrator

From: Dan Tadic, P.E., Municipal Engineer *DT*
David Longtin, P.E., Senior Engineer *DL*

Reviewed: Michael Harmon, P.E., Public Works Director *MH*
Jay Sweeney, Chief Finance and Administrative Officer *J*
Tori Fleming, Contract Manager *TF*

Date: April 6, 2016

Subject: Landfill and Crescent Lift Stations Improvement Project
Approval to Award Professional Services Contract

Background

The City and Borough of Sitka (CBS) Public Works Department owns and operates 39 sewage lift stations as part of the wastewater collection system. Wastewater collection is designed to take advantage of gravity flow as much as possible, but at certain points in the network, pumping assistance is needed to deliver sewage to the wastewater treatment plant, and that's when lift stations are needed.

The Engineering and Environmental Divisions have prioritized the repair or replacement of the Landfill and Crescent lift stations, secured low-interest Alaska Department of Environmental Conservation (ADEC) loans, and have selected a consulting engineer in accordance with the CBS procurement policy to assist us with the design of improvements at these lift stations.

The Landfill lift station pumps up to 200,000 gallons per day of corrosive leachate from the Kimsham landfill. The leachate damages the pumps and pipes, which requires a tremendous amount of maintenance from the wastewater staff. The force main carrying sewage away from the lift station has developed leaks five times in the past two years, each time requiring excavation and pipe repair along Tilson Street.

The 2012 Sewer Master Plan recommended full replacement of the Crescent lift station. The lift station, constructed in 1983, frequently clogs because the pumps are not capable of passing long, fibrous materials (i.e., sanitary wipes) that have become more common in domestic wastewater in recent years. Failure of the Crescent lift station would result in sewage backups from the Sitka Sound Science Center back to Totem Park and beyond. Public Works is planning on re-paving Lincoln Street in the vicinity of

the Crescent lift station in 2017, so completing the lift station prior to the paving project would minimize cutting into new pavement.

Analysis

PND Engineers, Inc. (PND), is a consulting engineering firm that was founded in 1979 with offices in Anchorage, Juneau and Seattle. A four-member selection committee chose PND from among the five proposers as the most qualified firm to complete this project based on their proposal, technical expertise, and availability to complete this project within our desired timeframe.

PND has teamed with Carson Dorn Inc. (for quality control), O'Neill Surveying & Engineering (survey work) and Morris Engineering Group (electrical engineering). PND's scope of work includes project management; research and site investigations; construction scoping; permitting and approvals; final design; bid-phase assistance; and assistance during construction. The total estimated fee for the above described services is \$139,534. Final design is expected by late July 2016, with construction beginning in mid-August.

Fiscal Note

Funding for the project is provided by the following sources:

\$ 694,170	available from FY 2014 ADEC Alaska Clean Water Fund Loan
\$ 502,500	FY 2017 ADEC ACWF Loan (pending – Crescent lift station)
<u>\$ 770,000</u>	Wastewater Fund
\$ 1,966,670	total project funding available

CBS estimates the costs of completing the Landfill and Crescent lift stations at \$1,177,500, so projected funding is sufficient. ADEC is processing our loan application for the Crescent lift station. In the unlikely event that this funding is not made available, the existing project funding of \$1,464,170 is sufficient.

CBS will not be charged interest or otherwise penalized for unspent ADEC loan proceeds. Unspent loan funding would be released back to ADEC when we close the loan.

Recommendation:

Approve award of a Professional Services Contract to PND Engineers, Inc., for the design of the Landfill and Crescent Lift Stations Improvements Project on a time-and-materials basis for a not-to-exceed amount of \$139,534.

Landfill and Crescent Lift Stations Improvement Project



The Crescent Lift Station, below, collects sewage in the welded tank to the right of the photo. When enough wastewater accumulates, two 2 horsepower submersible pumps push the water to a manhole on the Sitka Fine Arts Camp lawn, from where it flows by gravity down Lincoln Street.



A portion of the Landfill Lift Station force main, shown above, was removed after leaks developed in 2015. The leaks were due to the corrosive leachate pumped by the lift station. The lift stations improvement project will replace the ductile iron pipe with a pipe less vulnerable to corrosion.