



# City and Borough of Sitka

100 Lincoln Street • Sitka, Alaska 99835

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## MEMORANDUM

**To:** Honorable Mayor Paxton and Assembly Members

**From:** Dave Miller, Acting Municipal Administrator

**Reviewed:** Michael Harmon, P.E., Public Works Director *MA*  
Jay Sweeney, Chief Finance & Administrative Officer *JS*  
Shilo Williams, Environmental Superintendent *SW*  
Cliff Richter, P.E., Municipal Engineer *CR*  
Melissa Haley, Controller *MH*

**Date:** June 17, 2019

**Subject:** Water Transmission Main Repair Appropriation

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### Requested Action

Approve Ordinance 2019-28 appropriating \$400,000 in capital expenditures from the undesignated working capital balance of the Water Fund and authorize the expenditure of these funds.

### Summary

Public Works has discovered a break in the 24-inch water transmission main to town on Sawmill Creek Road (SMC) by the Indian River Bridge. This break appears to be increasing over time and it is critical for an accelerated repair to happen to avoid uncontrolled flows increasing to the point it could wash out SMC, significantly increasing the cost of the work and jeopardizing this vital State-maintained transportation corridor as well as water service to town.

The pipe is located approximately 20-ft below the road elevation, runs along the toe of the road embankment, and will entail complex construction due to conflicts with retaining walls, sidewalks, shoring of the road, and managing significant ground water. For this reason, we will be contracting with an experienced local contractor to perform this work. We will order and provide the materials and design the work with in-house engineering to accelerate the process.

### Fiscal Note

As of 12/31/2018 the Water fund had \$1.75 million in undesignated working capital/repair reserve. This appropriation will result in a decrease of 23% in funds available for unanticipated repairs to our infrastructure. Maintaining a sufficient level of unrestricted working capital in the CBS utilities is critical to ensure that funds are available for emergency repairs.

## **Project Background**

The water transmission main is the pipe that brings the water from the ultraviolet treatment plant at Gary Paxton Industrial Park to town. There are no water services on the transmission main. While the water is flowing towards town it is getting the necessary chlorine contact time to achieve proper disinfection. The water is considered fully treated once it reaches the National Cemetery. From there the water is distributed to our tanks and customers. There is a significant leak(s) in the section of transmission pipe between Indian River Bridge and Indian River Road, measured at in excess of 100 gallons per minute. The pipe was installed in 1987. The top of the pipe is located 20 feet below the top of the road and is in close proximity of the toe of the slope supporting SMC. Further complicating matters, the leak(s) is surfacing next to a retaining wall and a box culvert conveying flow to Sitka Sound Science Center. Excavating in that area will be challenging, potentially compromising the sidewalk and roadway and resulting in a lengthy road closure.

To minimize excavation adjacent to SMC, Public Works will build a parallel 500-foot water main within the SMC right-of-way, but located as far away (north) from the road as possible. The new section of 24" HDPE water main will be connected to the existing 24" ductile iron main at two locations adjacent to the road. The bypassed section of leaking pipe will be abandoned in place.