

Fixing a hole: City testing new pothole-filling machine for possible future use

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ALTON - Alton Public Works Director Bob Barnhart said the city has enough potholes to "keep us busy for a while."

Currently, each pothole is repaired by one of two two-man crews dispatched in one of two trucks dedicated to maintaining roads by repairing potholes and low points. Those workers then stand in the middle of the road and shovel coal patches into the potholes - a fix, which may only last as long as a few weeks under present conditions, Barnhart said.

"To remedy this problem, which Fourth Ward Alderwoman Tammy Smith said she hears about constantly from her constituents, the city is testing a new machine promising to make pothole repairs quicker and last up to 10 times longer called a Durapatcher Road Maintenance Machine.

"Right now we have two crews with two trucks and two guys to a truck to use cold patch to patch potholes up," Barnhart said. "That is one third of the street department on an effort, which continues year-round. Dedicating that much to road maintenance, despite its obvious importance, is taking away from what we need to be doing, which is repaving roads and construction."

The City of Alton tested the new machine throughout the day on Tuesday, March 14, 2017, including patching a significant low spot on Milnor. Barnhart, Smith and Alton Mayor Brant Walker observed the demonstration of the machine as it repaired the road with a four-part process.

Part one is cleaning the pothole or low spot, which Barnhart described as the "most important part of the process." During the initial phase of the repair process the pothole or low spot has its loose dust, dirt, rock and debris removed.

Part two squirts a layer of liquid asphalt to line the hole, which protects the repair materials from loosening and allows it to stick better to the lower layer of the pothole or low spot.

In the third phase, the actual patching is applied to the pothole or low spot with asphalt before part four, when a layer of aggregate is spat across the top of the newly-repaired pothole or low spot. Barnhart said the finished product is better than the coal patch process currently used.

Before the city makes a decision regarding the purchase of the new machine, room must be made in the budget. Barnhart said the cost ranges from \$113,000-\$180,000 depending on the condition and status of the machine. He said the price varies from used to new to demo. Barnhart said the machine would quickly pay for itself, however, if the potholes stay repaired for as long as it promises. Part of the demonstration Wednesday was to test the duration of the repairs as well.

"Over the last four years, the cost of coal patching is \$200,000," Barnhart said. "This machine can easily pay for itself. It can do one ton of coal patching for \$50. Had we purchased this machine four years ago, we could have seen savings of as much as \$132,000. That number is not considering the savings from labor costs and the cost incurred through the exposure to risk. It's a lot safer in the cab of a truck than standing in a traffic lane trying to patch a pothole with a shovel."

Only one person is required to operate the road patcher, which Barnhart also assured could do more repairs much faster.

"It will allow us to do a lot more things through automation and technology while using less work hours to do it," Walker added.

A final decision to purchase the machine had not been made as of Wednesday afternoon. Barnhart said he would talk to other agencies, which have utilized the machines, including the Illinois Department of Transportation (IDOT), to see how their machines have worked for their departments.