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Memorandum 20-162

TO: City Council

THROUGH: Rob Dumouchel, City Manager

FROM: Jan Keiser, PE, JD, Director of Public Works

DATE: October 8, 2020

SUBJECT: Cost to stabilize Horizon Court had decreased

I. Issue: The City Council adopted Ord. 20-58 authorizing the expenditure of \$300,000 from the HART-Road Fund to stabilize a side slope on Horizon Court that had failed. We have completed the repairs and wish to formally reduce the authorized funds.

II. Background:

In early August we observed that a downhill side slope of Horizon Court. We asked the City Council to declare this an emergency and to authorize funding to stabilize the road. At that time, we believed we needed to deploy a short term fix, to make sure the road stayed open to traffic and then, investigate a long term solution. We didn't know what had caused the slope failure. We believed the long term solution would require engineering expertise and a potentially expensive retaining system of some kind.

The Public Works road crew mobilized equipment and explored what was going on. We used the Vactor Truck to drill "test holes" on the roadside. All of the holes were dry, except for one – which gurgled with water. We had found an underground spring. We engaged the services of Geoff Coble, a local geophysicist who specializes in hydrology to review the situation. He concluded the spring had saturated the immediate area, causing the soils to slide. He recommended we install "french drains", a.k.a. known as a "burrito wrap", to create a pathway for the water to drain out of the road bed. The crew installed the burrito wrap, put the road back together and stabilized the sloughed area with rock. To do all this, we bought some filter fabric, a couple truckloads of drainrock and some culvert. The invoices aren't all in yet, but the cost should be under \$20,000.

Our goal was to stabilize the road, not rebuild it. We believe we've accomplished the mission. Thus, we invite the City Council to revise the spending authority in Ord. 20-58 to \$20,000.