



Legislation Text

File #: 18-2747, **Version:** 1

Resolution - A Resolution Authorizing of Funding in an Amount Not to Exceed \$175,000.00 and Approval of a Contract with Freese and Nichols, Inc. for Engineering Design Services to Prepare Seeton Road Roadway and Embankment Improvements at Joe Pool Lake for Public Bidding and Construction (Street Bond Fund)

Consider the authorization of funding and approval of the contract.

The authorization of funding in an amount not to exceed \$175,000.00 and approval of a contract with Freese and Nichols, Inc. for engineering design services to prepare , Seeton Road Roadway and Embankment Improvements at Joe Pool Lake for public bidding and construction.

Seeton Road lies on the western side of Joe Pool Lake. This roadway is a north/south, two-lane asphalt roadway and includes a bridge over Low Branch that drains into Joe Pool Lake. The bridge and earthen embankments on each end of the bridge were built by the U.S. Army Corps of Engineers (USACE) around 1985. The roadway approaches to the bridge were constructed using earthen fill to elevate the roadway and bridge deck above design flood elevations of Low Branch and Joe Pool Lake. The City maintains this roadway over the lake. Within the last several years, the City has consistently added asphalt overlays along the approach embankments on each end of the bridge to compensate for settlement within the earthen fill. The asphalt thickness within the overlay sections has now accumulated to over 12 inches in some locations near the bridge and the guardrails have moved down the embankment. Based upon movement within the asphalt overlays, the settlement is occurring at an increasing rate. The increased traffic in the area could be contributing to the settlement.

Freese and Nichols, Inc. have completed a geotechnical investigation of the embankment movement and theorize that desiccation cracks along with possible slope creep resulted in movement of the embankment and pavement.

To combat the slope movement this contract will provide the design for removing and replacing the upper three feet of the embankment, which includes the roadway and guard rail fence. The upper three feet of the embankment will be replaced with less plastic soil, crushed limestone base material and asphalt pavement along with geogrid reinforcement to add strength. The proposed repairs are estimated to add 10 to 15 years to the embankment and roadway. These improvements will not increase the capacity of Seeton Road. They are an interim measure to combat a potential disruptive and costly slope failure. Pending future approval of funding for construction (estimated cost \$1 to \$1.5 million) the anticipated timeframe for these improvements is the summer of 2019 since Seeton Road will need to be closed to traffic during the repairs.

The requested funds are for design services with Freese and Nichols, Inc. in the amount of \$140,550.00, an additional 5% contingency for potential design scope changes, survey services and other miscellaneous services, all to be accomplished within a budget of \$175,000.00.

When left unattended, desiccation cracks and slope creep can eventually lead to shallow slope failures. If not maintained or repaired in a timely manner, the shallow failures will progress into a larger slope failure area which jeopardizes the roadway and would be very costly to repair.

This design project was included in the 2017 Street Bond Fund Capital Plan.

The Assistant Director of Public Works - Transportation and City Engineer will be in attendance at the meeting to answer Council's questions regarding the proposed funding and contracts.

Street Bond Fund

David Boski, Assistant Director of Public Works - Transportation

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