



## MEMORANDUM

**TO:** Mayor and Council Members

**FROM:** Jose M. Guerrero, P.E. Interim Director  
Watershed Protection Department 

**DATE:** April 15, 2019

**SUBJECT:** Lower Shoal Creek Slope Failure Update, April 2019

The purpose of this memorandum is to provide you with an update on the Lower Shoal Creek slope failure and a forecast of upcoming items that will require Council action. For additional background, please refer to updates previously sent on [May 7](#), [May 18](#), [July 11](#), and [November 5](#), 2018.

The Watershed Protection Department and the Capital Contracting Office will be seeking Council action as follows, tentatively scheduled for June 20th: (1) ratification of four emergency contracts as described below; (2) authorization to negotiate and execute agreements for design and construction. Please note this is the continuation of a close collaboration between the following departments: Watershed Protection, Parks and Recreation, Austin Water, and Public Works.

### **Background:**

Recent movement at the top and bottom of the slope has been documented from the time of the original slope failure on May 4, 2018. Given the changing nature of the slope failure and potentially heavy spring rains, the Watershed Protection Department will continue to monitor the slope conditions closely. There is consensus from our internal and consultant engineers that the landmass continues to present a danger to public health and safety.

Progress to date has focused on three primary areas:

- Contracting for slope stabilization design alternatives analysis and consultation with design-build firms that specialize in large-scale slope failure stabilization;
- Coordination with adjacent private property owners about access, design, and cost-sharing; and
- Construction of wastewater and storm water pipe reroutes.

In order to advance the analysis of design alternatives and develop design-build cost estimates as quickly as possible, four emergency contracts for professional services have already been executed pursuant to the City's health and safety/emergency procedures. These emergency contracts together total \$1,039,774 and include the following:

1. City of Austin's Representative Engineering Services – HDR, Inc. - \$92,247.82.
2. Storm Drain Reroute Design on Wooldridge Dr., Freese and Nichols, Inc. (FNI) - \$268,357.00.
3. Phase 1A Advanced Data Collection/Landslide Emergency Services, Geostabilization Solutions, Inc. (GSI) - \$494,169.13.
4. Phase 1B 30% Design Alternatives Analysis, Cost Reimbursement Agreement with Private Property Owner - \$185,000.00.

**Current effort:**

Phase 1A - Data Collection work performed by GSI pursuant to the above-referenced contract has been completed. The geotechnical report and topographic/boundary survey have been reviewed and finalized by staff. This data will be used to design a solution to stabilize the slope.

As a result of continued coordination with adjacent property owners, Watershed Protection established a cost reimbursement agreement with the most affected property owner to complete Phase 1B - 30% Design Alternatives Analysis. The property owner contracted with an engineering firm to analyze design alternatives, and Watershed Protection has agreed to reimburse the property owner our cost share of \$185,000.

Watershed Protection received preliminary cost estimates for three slope stabilization design alternatives on March 4, 2019. The alternatives include several types of slope stabilization features on City parkland and private property. The preliminary cost estimates are for design-build services (which includes cost for both design and construction services) and range from approximately \$8M to \$16M, including a 25 percent contingency. Staff has reviewed this information and selected a preferred alternative. City staff will work on an agreement with the adjacent property owners to implement the selected solution.

Staff will seek Council authorization to negotiate and execute an agreement for the City's contribution to the public piece of the overall project.

All Phase 1B design alternatives include replacement of the collapsed 30-inch wastewater pipe. Once fully designed and constructed, this would replace the semi-permanent reroute system that was completed by Austin Water in July 2018. The alternatives do not include replacement of the damaged trail. However, they would stabilize the slope, which is a necessary first step.

Lastly, Watershed Protection has completed the design for the storm drain reroute project that will permanently divert neighborhood stormwater runoff from the affected slope to an existing drainage channel. The proposed storm line is located on Wooldridge Drive, and the affected property owners in the area have been notified of upcoming construction and traffic detours. Construction should begin in April 2019, after relocation of an existing gas line, and is expected

to be complete in approximately three to four months. For this construction, the City is using an existing contract that the City had already competitively procured.

If you or your staff have any questions, please contact Mike Kelly, P.E., WPD Managing Engineer, at (512) 974-6591 or [mike.kelly@austintexas.gov](mailto:mike.kelly@austintexas.gov).

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