



Recommendation for Water & Wastewater Commission

Commission Meeting Date:	June 12, 2019
Council Meeting Date:	June 20, 2019
Department:	Watershed Protection Department (19-2153)
Client:	Mike Kelly, Mike Russ, Kevin Koeller, Aiden Cohen, Rolando Fernandez
SUBJECT	
Ratify agreement with Hayward Baker Inc. for the delivery of 60% design work for the Shoal Creek Emergency Landslide repair near the 2500 Block of North Lamar Boulevard pursuant to emergency contract procedures and authorize negotiation and execution of an emergency design-build contract with Hayward Baker, Inc. for further design and construction of the Shoal Creek Emergency Landslide Repair in the amount of \$10,895,437.50 which includes payment for the 60% design work already performed plus a \$2,723,859.38 contingency, for a total contract amount not to exceed \$13,319,296.88.	
AMOUNT AND SOURCE OF FUNDING	
Funding in the amount of \$12,620,000 is available in the Fiscal Year 2018-2019 Capital Budget of the Watershed Protection Department: Funding in the amount of \$1,000,000 is available in the Fiscal Year 2018-2019 Capital Budget of Austin Water.	
Purchasing Language:	This is an emergency contract that did not go through the City's qualification-based selection process.
Prior Council Action:	May 23, 2019 – Council ratified four emergency contracts which included professional services agreements for engineering consulting services with HDR Engineering, Inc., Freese & Nichols, Inc., Geostabilization International, LLC, and a cost reimbursement agreement with Michael MacDougall and Bremond MacDougall for preliminary design alternatives analysis.
Boards and Commission Action:	To be reviewed by the Environmental Commission on June 5, 2019, and the Water & Wastewater Commission on June 12, 2019.
MBE/WBE:	This procurement is exempt from the City's MBE/WBE Program requirements as a public health and safety purchase.

The slope failure (landslide) occurred on the west bluff overlooking Shoal Creek adjacent to the 2500 block of North Lamar Boulevard on May 4, 2018 after a severe weather event. There were no injuries reported. For additional background, please refer to the five memos sent between May 2018 and April 2019. The trail was cordoned off from 24th Street to Shoal Creek Boulevard. The backyards of several homes on Wooldridge Drive overlooking the bluff were visibly impacted. City of Austin parkland, approximately 300 feet of the hike and bike trail, a boulder wall, and a wastewater pipe were damaged along Shoal Creek. A large quantity of soil, rock, and debris from the slope failure was deposited in the creek. The slope is still unstable and at risk of further movement. The City is monitoring the slope and creek conveyance until a permanent solution is implemented. Staff has been following emergency contract and expedited procurement procedures to advance slope repair design solutions.

The damaged 30-inch wastewater line cannot be replaced until the slope is restored. As a short term measure, a siphon was constructed under Shoal Creek and connected to a wastewater line in North Lamar. This was a temporary solution and the 30-inch line will need to be replaced. The North Lamar wastewater line does not have adequate capacity for the both the siphon flow and future growth.

The City reviewed Hayward Baker, Inc.'s qualifications-based selection process conducted by the City in June and July 2018. The selection panel determined that Hayward Baker, Inc. is qualified to perform this work. Hayward Baker, Inc. provided preliminary cost estimates for three (3) slope stabilization design solutions with the Phase 1B – 30% Design Alternative Analysis performed under a cost reimbursement agreement with the MacDougalls for \$185,000. This contract was ratified by Council on May 23, 2019. The alternatives included several types of slope stabilization features on City and private property. The cost estimates were for design-build services (which includes the cost for both design and construction services).

A design alternative was agreed upon by both the City and the private property owner. The selected solution will cost a total of \$13.6M for design and construction. The solution for stabilizing the slope includes a series of anchored drilled shaft walls and steel bar/nail reinforced rock walls with structural shotcrete facing, a limestone block wall along the west bank of Shoal Creek, and replacement of approximately 1,100 feet of wastewater line. The proposed improvements allow space along the creek for a trail to be constructed in the future.

The requested authorization will allow WPD to negotiate and execute a design-build contract in the amount of \$13.6M with Hayward Baker, Inc. In order to avoid schedule delays, Hayward Baker, Inc. is currently advancing this work to 60% design. Approximately \$130,000 in engineering services fees out of the total \$13.6M have been accrued to date and will require ratification.

Due to the sensitive nature of the slope and extensive coordination with affected property owners, the slope repair preliminary design phase has been a measured process that has taken longer than anticipated. However, any further delays on a repair solution continue to put public and private property at risk. This authorization is necessary to proceed with the design and construction of the slope repair. The property owners directly affected by the slope failure have been informed of the selected design solution. A public meeting was conducted by WPD, Parks and Recreation Department,

and the Public Works Department on July 19, 2018 at City Hall to provide an overview of the situation and answer questions. Another public meeting will be scheduled once more information is available on design and construction of a slope repair solution. This project is located zip code 78703 and is located in District 9.



MEMORANDUM

TO: Mayor and Council

FROM: Michael L. Personett, Interim Director, Watershed Protection
Kimberly McNeeley, Interim Director, Parks & Recreation

DATE: May 7, 2018

SUBJECT: Slope Failure Lower Shoal Creek

MLP
(initials)

The purpose of this memo is to further describe a slope failure that occurred along Shoal Creek on Friday, May 4, 2018, the actions that are currently underway by multiple city departments, as well as next steps to address the situation, both near-term and long-term.

On Friday, May 4, 2018, following the severe weather that moved through the Austin area, a slope failure occurred on the west bluff overlooking Shoal Creek adjacent to the 2500 block of North Lamar Blvd. There were no injuries to persons or pets along the hike and bike trail. The trail was immediately cordoned off from 24th Street to Shoal Creek Boulevard. There have been no reports of injury from private homeowners atop the bluff in the 2400 block of Wooldridge Drive, although the backyards of several homes overlooking the bluff were visibly impacted. City of Austin parkland and approximately 300 feet of the hike and bike trail along Shoal Creek were damaged by this slope failure. A boulder wall, constructed by the Watershed Protection Department (WPD) in 1999 to stabilize the channel bank, was also severely damaged. Of immediate concern is the large quantity of soil, rock and debris in the creek channel from the slope failure. This could pose a problem with conveyance of flood flows within the creek.

There appears to be a history of slope failures in this area, with the most recent having occurred in 1998. The bluff above Shoal Creek is comprised of Buda Limestone overlying an unstable Del Rio Clay formation. Fractures can develop in the limestone and large masses slide off, riding on top of the clay. The fracturing is the result of movement in the clay beneath the limestone. Similar historical failures have been noted by geologists along the bluff just north of last Friday's slope failure. While the specific cause of this slope failure is unknown at this point, the heavy rains that occurred prior to the failure may have played a role. Mass movement of soil like this is typically a combination of geology, water and topography (steep slopes). Please note that the hike and bike trail improvements were very likely not a contributing factor in the cause of this massive slope failure, but were impacted by it. No recent stream stabilization work has occurred in the impacted stream reach.

Personnel from WPD, Parks and Recreation (PARC), the Public Works Department (PWD), and Austin Water (AW) have been onsite over the weekend and on Monday to inspect the impacted area and initiate our assessments of conditions and possible actions to address immediate concerns. This includes WPD stream restoration engineers, geologists, field operations, and safety personnel, as well as engineers from AW and PARC senior management. The Development Services Department has also been notified, including the City's Building Official, to assist with permitting of emergency actions and to address any safety concerns with potentially affected residential structures.

Below are the actions that are being taken to more fully assess conditions and to evaluate mitigation measures:

- As noted, the trail has been closed and PARC is considering options to reroute pedestrian and bike traffic;
- AW is conducting a TV inspection of the wastewater line to determine if there has been structural damage;
- WPD is conducting aerial video reconnaissance of the site to better assess the extent of the slope failure;
- WPD engineers will obtain new survey data and perform modeling to determine the degree to which the flood conveyance capacity of the creek channel has been impacted;
- WPD engineers and field operations personnel are assessing measures that might be employed to mitigate obstruction of flood flows (e.g., removal of materials from the channel and vegetation from the floodplain) and provide temporary stabilization;
- The WPD Safety Office is assessing potential work hazards and will develop a safety plan prior to any work commencing at the site;
- A forensic geotechnical analysis will be conducted to determine cause and extent of slope failure and likelihood of further soil movement; and
- Staff are working with affected private property owners to assess damage to their properties and potential near and long-term solutions.

Over the next several days we should have enough data and analyses to further define key next steps, particularly any measures that can be implemented immediately to stabilize the situation. We will keep you informed as our work progresses. If you or your staff have any questions, please contact Mike Kelly, P.E., Managing Engineer with WPD at (512) 974-6592 or at mike.kelly@austintexas.gov.

cc: Spencer Cronk, City Manager
Sara Hensley, Interim Assistant City Manager
Robert Goode, Assistant City Manager
Joe Pantalione, Interim Assistant City Manager
Kimberley McNeeley, Interim Director, Parks and Recreation Department
Greg Meszaros, Director, Austin Water
Richard Mendoza, Director, Public Works Department
Rodney Gonzales, Director, Development Services Department







MEMORANDUM

TO: Mayor and Council

FROM: Michael L. Personett, Interim Director
Watershed Protection Department

DATE: July 11, 2018

SUBJECT: Update: Slope Failure Lower Shoal Creek

The purpose of this memo is to provide an update on the Shoal Creek slope failure that occurred on Friday, May 4, 2018.

Since the last staff update on May 18, the landslide area has remained generally stable. There has been erosion of the landslide material from Shoal Creek during the rains of July 4-9. The removal of this soil from the landslide has increased flood conveyance but has not noticeably affected the stability of the upper slope. Staff continues to monitor the situation.

Progress to date on solutions has focused on five primary areas:

- Selection of a Design/Build firm to begin the engineered solution for stability to public property and repair of Shoal Creek and affected utilities;
- Coordination with the four private property owners on top of the bluff about property access and easements necessary to perform the work, as well as the proposed scope and design elements that would affect their properties;
- Setting up stakeholder meetings to inform the public;
- Construction to re-route a 30-inch wastewater line until the failed line can be restored;
- Maintenance of a temporary storm drain diversion system on Wooldridge Drive and design of a permanent diversion system.

Staff is following emergency contract and expedited procurement procedures. As the contracts necessary for this project will exceed Administrative Authority, staff will produce a memo of ratification and a Request for Council Action at a later date for Council to approve and ratify the contracts necessary to complete the project. Staff will authorize notices to proceed as soon as possible once the contracts have been negotiated and reviewed.

The proposed scopes of the work under expedited review include stabilization of the failure on City of Austin parkland, as well as certain work to stabilize the vertical bluff (located on private property), to mitigate the safety hazard posed by future movement of the slope. Once construction begins, it is anticipated that the construction phase will last about six months. Until we have more defined scope parameters, the cost estimate and construction start date are still at a preliminary stage.

Because the project team envisions the City of Austin performing work on private property, the Office of Real Estate Services is engaged to help negotiate the access and other easements necessary to complete the project. For any elements of the project scope that require work on private property, a notice to proceed beyond preliminary design and data gathering will be contingent upon agreements from the private property owners to grant or dedicate the necessary easements.

Staff from Watershed Protection (WPD), Parks and Recreation (PARC) and Public Works (PWD) have met with key stakeholders from the Shoal Creek Conservancy and the Pease Park Conservancy to keep them informed of the progress to date and plans moving forward. Following that meeting, WPD and PARC PIO staff are planning a public meeting to provide the evolving details of the plan to restore the damaged drainage and wastewater infrastructure and mitigate the safety hazard posed by the instability of the slope after the landslide. That meeting is tentatively scheduled for July 19, 2018, and the public will be notified shortly.

Austin Water is in the construction phase of building a sanitary pipe re-route system that will take wastewater from the existing pipeline on the north side of Shoal Creek and divert it to an auxiliary pipeline in North Lamar. The auxiliary line will operate at capacity but has little room for contingency flows. Thus, it is considered a short-term solution until the collapsed 30-inch line is replaced under the trail along Shoal Creek. Construction of the temporary re-route should be complete by August 2018. Construction of the temporary re-route started on June 25 and is currently scheduled to be complete by August 2018. This construction will require closing one southbound lane of North Lamar for approximately one week beginning July 14.

In addition, Watershed Protection has been maintaining a storm drain diversion system of inflatable inlet plugs and sandbags to keep stormwater runoff from discharging onto the failed slope. WPD Field Operations crews have responded during each rain event by moving and replacing sandbags as needed to allow residential access to driveways while preventing runoff from entering yards. Staff is currently designing a new storm drain system for Wooldridge Drive. Once completed, the construction of this system will also be performed under the emergency declaration by a contractor separate from the slope stabilization contractor.


We will provide another update with further progress as more information is available. If you or your staff have any questions, please contact Mike Kelly, P.E., Managing Engineer with WPD at (512) 974-6591 or at mike.kelly@austintexas.gov or Eric Loucks, P.E., Supervising Engineer with WPD at (512) 974-2534 or eric.loucks@austintexas.gov

cc: Spencer Cronk, City Manager
Sara Hensley, Interim Assistant City Manager
Robert Goode, Assistant City Manager
Joe Pantalione, Interim Assistant City Manager
Kimberley McNeeley, Interim Director, Parks and Recreation Department
Greg Meszaros, Director, Austin Water
Richard Mendoza, Director, Public Works Department
Rodney Gonzales, Director, Development Services Department
Alex Gale, Interim Officer, Office of Real Estate Services



MEMORANDUM

TO: Mayor and Council

FROM: Sara Boone Hartley, Interim Director
Watershed Protection Department 

DATE: November 5, 2018

SUBJECT: Lower Shoal Creek Slope Failure Update, November 2018

The memo is an update to the May 4, 2018 Shoal Creek slope failure. Since the July 11, 2018 update, the landslide area has remained generally stable despite the recent rainy weather. The landslide has been recognized as a failure of the underlying clay soils on both private and public property due to inherent instability of the soils and rock combined with rainfall and runoff from the top of the slope. The failure is not the result of the flow of Shoal Creek or any City activity associated with Shoal Creek.

Progress to-date on solutions has focused on four primary areas:

- Contracting with firm selected by City for stabilization;
- Coordination with adjacent private property owners re: access, design and cost-sharing;
- Providing information to media, stakeholders, and public;
- Construction of wastewater and stormwater pipe re-routes.

The City has secured a contract (Phase 1a) with GeoStabilization International (GSI) to provide the next phase of data collection needed for design of a solution. This phase is scheduled to take 3 months. Originally, staff had anticipated authorizing a design-build contract with GSI to furnish additional data collection and perform the design and construction services within a 6-month period. That plan changed due to the continued coordination with adjacent property owners to secure temporary and permanent rights of access to private property necessary to implement the City's original solution. Essentially, the property owners have made their continued coordination contingent upon the City revising its original design to include the owners' preferred design elements.

The City's responsibility extends to the repair of public property/infrastructure and the adjacent private property to the extent it reduces the likelihood of another failure. Staff has been consistently working with the two most-affected property owners to reach an agreement towards a solution that satisfies public and private interests. The City's next proposed step is to compare design alternatives using available data gathered to-date that include a proposal from the property owners that would restore a portion of their property beyond the City's initial plan for infrastructure repair and public safety. Review of the design alternatives will give the City

information necessary to determine what portion of the owners' preferred design primarily benefits private property and requires funding from the property owners.

While the City cannot fund improvements that primarily benefit private property, we can coordinate private and public work through a Community Facilities Agreement to outline the roles and responsibilities of both parties in an equitable and legal cost share. These ongoing negotiations have slowed further progress on the design and construction of an engineered solution.

The Watershed Protection (WPD), Parks and Recreation (PARD), and Public Works (PWD) departments conducted a public meeting on July 19, 2018 at City Hall to provide an overview of the situation and answer questions.

In July, Austin Water (AW) completed construction of a semi-permanent wastewater pipe re-route system that diverts wastewater from the existing pipeline in Shoal Creek to an auxiliary pipeline in North Lamar Blvd. The auxiliary line will operate at capacity but has little room for contingency flows. Thus, it is considered a short-term solution until the collapsed 30-inch line is replaced under the trail along Shoal Creek. Replacement of this pipe will be part of the improvements being designed to remediate the slope.

Finally, WPD is in the design phase for a project to permanently divert neighborhood stormwater runoff in the right-of-way from the affected slope to a drainage channel near Gaston Place. In an effort to minimize runoff from the top slope, the two private property owners most affected by the failure have taken steps to temporarily divert their own drainage pipes that had been discharging runoff onto the slope from the private property drainage.

As soon as we have more defined progress on contracts, agreements, schedules and cost estimates, we will provide another update. 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.

cc: Spencer Cronk, City Manager
Joe Pantalione, Interim Assistant City Manager
Sara Hensley, Interim Assistant City Manager
Robert Goode, Assistant City Manager
Anne Morgan, City Attorney
Kimberley McNeeley, Interim Director, Parks and Recreation Department
Greg Meszaros, Director, Austin Water
Richard Mendoza, Director, Public Works Department
Rodney Gonzales, Director, Development Services Department



MEMORANDUM

TO: Mayor and Council

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

DATE: March 18, 2019

SUBJECT: Lower Shoal Creek Slope Failure Update, March 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 would require Council action. For additional background, please refer to updates (see below) previously sent on [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 May 9th: (1) ratification of four emergency contracts as described below; (2) authorization to negotiate and execute agreements for design and construction, up to \$16M. The City does not expect to bear the full cost of the \$16M contract if it includes improvements to private property.

Background:

The slope failure area has remained generally stable. However, movement at the top and bottom of the slope has been documented from the time of the original slope failure on May 4, 2018, until a survey completed in December 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.

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, four emergency contracts for professional services have already been executed in the amount of \$1,039,774. These emergency contracts 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 are being reviewed by staff and will be finalized this month. 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 is currently reviewing this information and will continue discussions with the property owner and consulting engineers in the next month. One or more design alternatives may be eliminated during the review process. Once a design alternative is selected, Watershed Protection will begin work on an agreement with the adjacent property owners to implement the selected solution.

Watershed Protection would seek Council authorization to negotiate and execute a Community Facilities Agreement (CFA) 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 a contractor that had been competitively procured under an existing contract.


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.

cc: Spencer Cronk, City Manager
Rey Arellano, Assistant City Manager
Rodney Gonzales, Assistant City Manager
Chris Shorter, Assistant City Manager
Sara Hensley, Director, Parks and Recreation Department
Greg Meszaros, Director, Austin Water
Richard Mendoza, Director, Public Works Department
Anne Morgan, City Attorney



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.

cc: Spencer Cronk, City Manager
Rey Arellano, Assistant City Manager
Rodney Gonzales, Assistant City Manager
Chris Shorter, Assistant City Manager
Sara Hensley, Director, Parks and Recreation Department
Greg Meszaros, Director, Austin Water
Richard Mendoza, Director, Public Works Department
Anne Morgan, City Attorney