


# CITY OF SAN ANTONIO

## TRANSPORTATION & CAPITAL IMPROVEMENTS

**TO:** 2017 Drainage Community Bond Committee

**FROM:** Lori Houston, Assistant City Manager 

**COPY:** Sheryl Sculley, City Manager; Executive Leadership Team; Mike Frisbie, Transportation & Capital Improvements Director/City Engineer

**DATE:** October 21, 2016

**SUBJECT:** 2017 DRAINAGE COMMUNITY BOND COMMITTEE REQUESTED INFORMATION

This memo addresses requests for information from 2017 Community Bond Committee members and citizens regarding the Drainage 2017 Community Bond Committee meeting held on October 13, 2016.

### Drainage

**Vidor Ave. Area Drainage Project** Citizens Margot Moczygemba, Natalie Reyes Blanquiz, Mercedes Garcia, and Maria Esparza reported street flooding along Sprucewood, Vidor, Rexford, and Chulie. This Council District 1 project is estimated at \$6.7M and consists of reconstructing these streets, installing a storm drain system beneath Vidor Ave., and reconstructing the channel along the Union Pacific Railroad. Street lighting and water elevation markers in this area will be evaluated regardless if the project is selected for the 2017 Bond.

**N. New Braunfels** Citizen William Schiller reported of major drainage issues along N. New Braunfels. The City of San Antonio, Bexar County, and the San Antonio River Authority are all aware of the street flooding along N. New Braunfels and the major challenges it poses to resolve, without causing downstream impacts. Last year the three agencies even went as far as performing a study to review potentially extending the San Antonio River flood control underground tunnel. Although several alternatives were investigated, each one required approximately \$35M of drainage improvements along N. New Braunfels from Basse Rd. to Austin Hwy to alleviate flooding. Furthermore, any project along N. New Braunfels in Council District 10 cannot be considered until drainage improvements are first made along Broadway through Alamo Heights. For these reasons any significant drainage improvement projects along N. New Braunfels are not considered viable at this time.

**Griggs Ave** Citizen Rosanna Patterson at 322 Griggs Ave reported her house being flooded, as well as local drainage issues along the 300 block of Griggs consisting of standing water in the street and lot-to-lot drainage from adjoining properties. This combined Council District 5 and 7 project is estimated at \$2.4M to reconstruct Griggs Ave. from Fig St. to Efron Ave.

**Acuna St.** Citizen Lauro de Leon at 622 Acuna St. reported local drainage issues along Acuna St. consisting of standing water in the street and potential lot-to-lot drainage from adjoining properties. This Council District 6 project is estimated at \$0.6M to reconstruct Acuna St. from San Fernando St. to the cul-de-sac. This project could potentially be funded through the City's annual operating or capital budgets in future years.

**Overbrook Channel** Citizens Frank Fonseca and Ernest Mendoza in Council District 7 along Overbrook, Altgelt, and Babcock (Maverick Neighborhood Association) have reported significant flooding caused by

the undersized channel along Overbrook. Since this channel is at the top of the watershed, any significant improvements done to this channel, such as increasing the culverts at Babcock, will create adverse impacts to the residents downstream. The drainage improvements to this system must begin from the downstream end (Seeling Channel) and continue to work its way upstream until the entire system is reconstructed; therefore, the Overbrook Project is not considered viable at this time.

**District 5 Projects** Committee Member Michael Martinez asked why there were no proposed drainage projects in District 5. As discussed at the beginning of the meeting, the City utilizes a methodology of rough proportionality. As an example, some Council Districts may need more park or senior center facilities and may wish to include more funding for those instead of drainage projects. In addition, currently there are two on-going Council District 5 drainage projects currently underway outside the 2017 Bond. Lastly, as mentioned to the Committee Member after the meeting, a portion of the proposed \$24M Port San Antonio Project resides in Council District 5.

**Port San Antonio Project** Committee Member Mike Flores requested a breakdown of the project between Council Districts 4 and 5. As mentioned to the Committee Member Michael Martinez after the meeting, a portion of the proposed \$24M Port San Antonio Project resides in Council District 5. Approximately \$1M of the \$24M is allocated for the East Kelley improvements within Council District 5 (east of Quintana Rd.).

**Number of Flooded Structures** Committee Member Steve Grau requested the number of structure removed from the floodplain. Although only 6 of the recommended 2017 Bond projects are located within the mapped FEMA 100-year (1% annual chance) floodplain, this does not imply the remaining projects are immune to significant flooding. Typically FEMA does not formally designate an area as a floodplain until the drainage area is 1.5 square miles or greater. Since most of the proposed projects have much smaller drainage areas, they therefore do not have an associated mapped 1% annual chance floodplain. However, the City is aware of the flooding challenges in these areas and that they can occur during much smaller storm events than the 1% annual chance storm event. The projects with FEMA floodplain are listed in the below table, as well as the anticipated number of structures that would be removed by the project. The projects not listed (those without FEMA floodplain) include a combination of structural flooding, street flooding, and property flooding.

<b>Floodplain Projects</b>	<b>Structures Removed</b>	<b>Notes</b>
Barbara Drive Phase 2	90-100	Ultimate project build-out
Beitel Creekway Improvements	N/A	No existing structures, but will create developable acreage
Panther Springs Creek Restoration	0	Natural channel restoration
Paso Del Norte (Shady Oaks)	0	Removal of low water crossings
San Pedro Creek Improvements	35	Phases 1-4
Seeling Channel Phase 3	100-120	Phases 1-3

**Salado Creek** Committee Member commented that the Salado Creek located around the Austin Highway area does not look presentable and is requesting for maintenance to be done. This area of Salado Creek is considered a Natural Creekway and is therefore part of TCI's Natural Creekway Debris Removal Program, a subcategory to the Infrastructure Management Program (IMP). By following UTSA's "Technical and Field Guide: Management Practices for Natural Waterways", the City does not completely clear out a channel but instead focuses on removing debris that could potentially impede storm water

conveyance. Utilizing this practice ensures the City maintains ecological services such as providing wildlife habitat, promoting a diverse native plant life, maintaining water quality, controlling erosion and allowing infiltration into the soil and aquifer.

A detailed schedule of the Natural Creekway Debris Removal Program can be found on TCI's website ([www.sanantonio.gov/TCI](http://www.sanantonio.gov/TCI), direct link [https://qgis.sanantonio.gov/TCI/TCI\\_IMP/default.html](https://qgis.sanantonio.gov/TCI/TCI_IMP/default.html)).

**Laddie Place/Kampmann Area** Bianca Maldonado, president of the Monticello Park Neighborhood Association, presented five project options for bond funding consideration. The project options were recommended to supplement the previously constructed Laddie Place detention ponds with the aim of providing further flood reduction in or around the Kampmann area. Option 1 included increasing the capacity of the Laddie Place Phase 1 and 2 detention ponds; Options 2-4 involved acquiring land and providing additional detention near the existing Laddie Place detention ponds; and Option 5 included partial reconstruction of the Kampmann underground drainage system.

**Option 1:** The potential for modifying Laddie Place Phase 1 and 2 ponds and providing a significant positive impact downstream are limited. The design and construction of those ponds basically maximized their benefit within the given space constraints. It appears that the Laddie Place Phase 1 detention pond could possibly be deepened slightly while maintaining gravity flow functionality at the pond outfall; however, the additional depth would likely provide nominal additional storage. It does not appear that the Laddie Place Phase 2 detention pond could be deepened while maintaining gravity flow functionality at the pond outfall.

**Options 2-4:** Providing additional detention and/or modifying the drainage system in the Kampmann area could have a positive impact on the Kampmann area and downstream. TCI is revisiting previous studies and looking into new options for benefit within the watershed. Cost-benefit analyses are required prior to making further recommendation.

**Option 5:** Reconstruction of the existing Kampmann underground storm drain system to increase its capacity. A variation of this option was explored in the Upper Woodlawn Lake Drainage Study (September 27, 2012, by AECOM). The project was estimated to cost approximately \$51,960,000 and several difficult constraints would likely be encountered during design and construction. The same study identified two alternate storm drain upgrade projects which, when combined, would provide additional flood reduction benefits for this area. The total combined cost for these two projects is estimated to be approximately \$39,690,000 and the study noted that all of the phases for the two projects would need to be constructed before maximum benefits are realized.