October 3, 2017

Agenda Item 10
Adoption of Ruthrauff Basin Management Study

Background

The Ruthrauff Basin is an area with chronic urban sheet flooding problems, resulting largely from development constructed prior to enactment of the National Flood Insurance Program (NFIP) and with little attention to providing adequate drainage to mitigate the impact of roadways and rooftops on previously agricultural land. The Ruthrauff Basin Management Study’s goal is to evaluate these flooding problems, revise the effective regulatory floodplain and recommend future Capital Improvement Projects to relieve the flooding problems impacting the watershed.

Study Analysis and Recommendations

Pima County recognizes that having more precise flood hazard information provides numerous benefits by better assessing actual risk and reducing uncertainty. The development of a two-dimensional flood flow model allows the Regional Flood Control District (RFCD) and the development community to better understand flood risks associated with the existing conditions in this very complex hydrologic flow regime and to plan for and develop drainage solutions. The recently completed evaluation of the flood risk and the new floodplain mapping will result in removal of property worth over $40 million from the FEMA Special Flood Hazard Area. The City and County anticipate this action will result in increased redevelopment opportunities in this area.

The Study also identifies areas were drainage improvements can be made in order to further reduce flooding and increase the development potential for this area. The Capital Improvement Projects identified are only evaluated at an initial feasibility level in order to identify any apparent limitations or obstacles that would make construction impractical. However, the improvements remain conceptual at this time; and funding is not being requested for any projects identified herein. Ultimately, these projects may be funded by various means, including by the City, the County or by the development community when development projects are proposed.

Project Development and Procurement

The Ruthrauff Basin Management Plan is a planning tool that provides guidance for use during the development process; establishes goals to address flooding and drainage issues; and establishes recommendations for projects to mitigate flooding. When projects are considered
viable and appropriate, the RFCD will request funding through the typical procurement process.

The Study does not request funding or result in the construction of any projects. For example, the design and cost estimates for placing culverts through the railroad embankment at Gardner Lane and Highway Drive, which is the most significant drainage project identified in the Study, is currently being developed for processing through the appropriate procurement process. Future projects will be procured similarly.

Recommendation

I recommend the Board of Supervisors approve Resolution 2017-FC3 adopting the Ruthrauff Basin Management Study as a roadmap for the methodical completion of future projects to address and mitigate urban sheet flooding in the area covered by the Study.

Respectfully submitted,

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