Freese and Nichols, Inc.

Near Southside Regional Drainage Plan

Stakeholder Meeting # 3 – Thursday, February 25, 2016 – 6 PM to 8 PM

Attendees

ATTENDEE NAME	ORGANIZATION
Ray Boothe	Architect
Mike Brennan	Fort Worth South, Inc.
Graham Brizendine	Property owner in the Leslie Creek area
Bruce Cavet	Williamson-Dickie
Tom Galbreath	President, Dunaway Associates
Gary Havener	Property Owner
Curvie Hawkins	The T
Tom Malone	Architect
Jesse Stamper	Investor/Property Owner
Ryan LaValley	Civil Engineer, Dunaway Associates
Tom & Karen Reynolds	Property Owners
Kelly Allen Gray	District 8 Councilmember
Ann Zadeh	District 9 Councilmember
Greg Simmons	Assistant Director, CFW TPW
Chris Johnson	Engineering Manager, CFW TPW Stormwater Management Division
Jennifer Dyke	Planner, CFW TPW Stormwater Management Division
Linda Sterne	Communications Officer CFW TPW Stormwater Management Division
Kelly Dillard	Freese and Nichols
Scott Hubley	Freese and Nichols
Mark Pauls	Freese and Nichols
Evelyn Torres	OCG PR

Jennifer Dyke and Mike Brennan opened the meeting. Jennifer and Scott went through the PowerPoint presentation and questions were taken and answered after each section. The following was covered during the meeting:

- Introduction and Background
    - Long-range planning for drainage improvements and redevelopment strategies
    - This is a planning effort, not a project
    - The findings will not solve all flooding problems; goal is to identify alternative solutions that can be implemented with partners
    - Your feedback, knowledge and input is very important to us

- Existing Conditions Analysis
    - The planning area consists of 5 mapsheds: Fairmount, Henderson, Van Zandt, Butler, and Leslie Creek
    - Known flooding information collected at the first stakeholder meeting and City high water incidents data help support the reason for performing this planning effort
    - The storm drain systems correspond with the locations of historical channels, which were enclosed. The systems are undersized.
    - There is no FEMA floodplain in this area
    - There was previously no detailed inundation mapping for this area
    - The model results were validated against the June 2014 flood event

- Target Detention Volumes
    - Objective of the planning effort is to balance the needs for improving existing drainage conditions and supporting a more efficient development process
    - Potential solutions include green infrastructure for new development to reduce runoff, structural projects to convey runoff, and detention to store runoff
    - Potential locations for placement of detention were identified considering proximity to the flood hazard, current development, potential redevelopment and parks plans
    - Initial detention volume estimates were determined for major branches of the storm drain systems for the 100-yr and 5-yr storm events
    - The volumes identified on the slides would prevent building flooding but public road ROW and private property would still experience flooding
    - A large amount of land is required to mitigate flooding, which is difficult to implement in a highly developed area

- Improvement Alternatives
    - The following criteria were used for identification of potential locations for drainage improvement alternatives:
        - Proximity to flood hazard
        - Input from stakeholder meetings
        - Input from Henderson property owner meeting
        - Constrained by current land use (identified relatively vacant properties)
    - 18 locations were evaluated
    - Assessments were performed for individual alternatives and combinations of alternatives
    - The 4 locations with the greatest likelihood to be effective were discussed as draft concepts

    - Fairmount Watershed
        - Pipe capacity improvement project along W Magnolia and 8th
            - Removes an existing bottleneck in the storm drain system
            - Reduces flooding along W Magnolia and 8th

            - Removes flooding from 3 flood prone structures in the 5-yr storm event
            - This project could potentially be implemented in conjunction with a road rehab project in the future

    - Henderson Watershed
        - Pipe capacity improvement project along Travis Avenue between W Rosedale Street and W Terrell Avenue
            - Removes an existing bottleneck in the storm drain system
            - Reduces flooding along Lipscomb and Travis but does not provide significant benefit to reducing flooding to flood prone structures.
            - This project would need to be paired with detention, as it increases flooding issues downstream at the intersection of Lipscomb and Vickery
            - This project could potentially be implemented in conjunction with a road rehab project in the future
        - Surface detention facility at the intersection of Lipscomb and Vickery
            - Reduces flooding at the intersection of Lipscomb and Vickery
            - Removes flooding from 3 flood prone structures in the 100-yr storm event
            - The regional detention provided by this alternative has the potential to both reduce existing flooding and offset development impacts
            - The detention basin could be built as a multi-use facility to serve as a community amenity such as a park
            - Successful examples of multi-use stormwater detention basins in Fort Worth include basins at Luella Merrett Elementary School and Eastern Hills Elementary School
            - Successful multi-use stormwater detention basin projects in other parts of the country include Historic Fourth Ward Park in Atlanta and Corktown Common in Toronto

    - Van Zandt Watershed
        - Daylighting at the watershed outlet east of I-35W and south of Rosedale
            - Daylighting consists of opening up the storm drain system to function as a channel
            - Successful examples of daylighting in Yonkers, New York and Falls Church, Virginia
            - Alternative would require the acquisition of ~15 structures
            - There are 2 properties owned by the City and 4 owned by Habitat for Humanity in this area
            - The primary benefit of the project is the removal of flood prone homes. There is not a significant benefit along Rosedale.
            - This concept is consistent with the East Rosedale Street Enhancements plan and would provide opportunities for recreational use and connectivity between the Evans & Rosedale Urban Village, Hillside Park, and the surrounding neighborhood

- Development Impacts Analysis
    - It is challenging for developers to address stormwater impacts within their own lots in infill situations since lots are typically smaller and surrounded by development
    - The City has been asked the following question: Since the Near Southside vicinity is highly-developed already, could additional development occur that increases the

amount of impervious surface without having significant adverse impacts on surrounding property? If so, could the permitting process be greatly simplified?
    - Analysis was performed to determine the impact of adding additional impervious cover to the Southside area based on current zoning. Based on the findings, the answer to the above question was no, the addition of impervious cover without mitigation would cause adverse impacts to others. Although the impacts occur in limited locations, the magnitude of the impacts on private property is unacceptable.
    - Adverse impacts would be see in the public right-of-way and private property
    - In the Henderson watershed, regional detention at Vickery could offset impacts for the 100-yr event
    - Recent updates to the stormwater criteria manual provide a more streamlined review process for infill development:
        - Grading permit threshold increased from 0.5 acres to 1.0 acre
        - A simplified infill development methodology is available for small sites that meet certain criteria (see iSWM Criteria Manual Section 1.1)

- Conclusions and Wrap-up
    - To significantly reduce flooding on a wide-scale basis in this area by providing multi-objective open space that can be used for both flood reduction and recreation, land use will need to change
    - Impervious cover cannot be increased without having adverse impacts
    - Implementation of potential solutions would depend on:
        - Acceptance of solution by the community
        - Significant financial partnership opportunities
        - Balancing Citywide stormwater needs and priorities
        - Availability of funding
        - More detailed analysis to ensure feasibility
    - Tonight is final planned stakeholder meeting
    - As a result of this planning effort:
        - Development will be better informed- before this planning effort, the flood hazard was not mapped. This information can now be shared with the residents of the Southside area so they are better informed of the flood hazard. Developers can use this information to better plan future development.
        - City is well-positioned for partnership opportunities- The City now knows how much detention is needed, in what general locations it is needed, and the types of solutions that are effective to reducing flooding the Southside area. This helps the City be more strategic to identify future partnerships.
    - PPT from today's meeting will be added to the website
    - Summary of planning effort will be added to website this fall
    - The group discussed the best way to communicate the flood hazard to the community
- Q&A/Discussion- see below

A copy of the meeting agenda and PowerPoint are available at the following website: http://fortworthtexas.gov/southsidedrainage/

The questions, answers, and discussion during the meeting are noted below:

Q **How did we go from the 18 alternatives which were investigated to the 4 alternatives which were presented?**

A The 4 alternatives presented represent the most promising alternatives, which have the most benefit and possibility for implementation.

Q **Is the flooding south of Rosedale and east of I-35W really a problem? Although there are reported incidents at the intersection of Rosedale and I-35W, the neighborhood is still a good distance from this intersection. I'm concerned about publicly proposing the acquisition of property before having had conversations with property owners.**

A The hydraulic model indicates a significant flood hazard in this area. There are not reported flood incidents in the City database for this neighborhood, however this does not necessarily indicate that there is not a serious flood hazard. The database only dates back to 2009 so documentation of incidents is only available if rain actually falls in this area and if residents report any flooding.

A The acquisition of homes and daylighting of the storm drain line represent a potential solution. More detailed analysis and conversations with home owners and area residents would be necessary before moving forward with this potential solution.

Q **What is the ultimate goal and timeline for implementation?**

A This planning effort is the first step and positions the City to take action when opportunities arise. Significant financial partnerships, more detailed analysis, acceptance of solutions by the community, balancing Citywide stormwater needs and priorities, and availability of funding are necessary to move forward on the potential solutions. Given the limited operational budget for City-wide stormwater needs and because the potential solutions only provide an incremental flood reduction benefit, the current list of potential solutions does not rank high enough from a cost-benefit perspective to take immediate action.

Q **Couldn't we put together cost-benefit analysis to better assess the alternatives and move the planning process forward?**

A Cost estimates have been developed for the potential solutions, which will be documented in a report for future reference. A detailed benefit analysis according to the standard FEMA methodology has not been performed. Benefits are documented by the number of potential flood prone structures removed from the area of inundation, by how much depth the inundation is reduced for floodprone structures, and by the reduction of flooding depths in various roadway intersections.

Q **Shouldn't the pipe capacity improvements be incorporated in the capital improvement budget already? It seems unlikely to get private funding for public flooding issues within the right-of-way.**

A Given the limited operational budget for City-wide stormwater needs, the current list of potential solutions does not rank high enough from a cost-benefit perspective to take immediate action and is not included in the current stormwater capital project budget. As roads are rehabilitated over time, pipe capacity improvements will be considered in conjunction with road projects so the cost can be jointly shared and the community is only disrupted by construction once in these areas.

Q **Are stormwater utility fee dollars spent according to the areas from which they are collected?**

A No.

Q **Wasn't there detention implemented at the 711 gas station at the corner of Rosedale and I-35W? Shouldn't this help mitigate the flooding problem at the intersection of Rosedale and I-35W?**

A The detention at this location only mitigates for impacts associated with development of the gas station and does not provide regional mitigation to reduce the existing flood problem. The City does not require private developers to reduce the existing flooding problem; only to ensure their development does not increase flooding.

Q **Could we partner with TxDOT, or the railroad, or the county to implement large-scale solutions on available right-of-way?**

A One of the most effective ways to reduce flooding is to manage it in place by identifying solutions in areas that are already flooding. These properties were not well-positioned near existing flooding issues and do not overlap with the locations identified in the potential solutions map. However, the City will document these as potential ideas and reconsider them as we wrap the planning effort up.

Q **Isn't it time for the City to prioritize these projects and fine-tune the solutions to resolve the flooding issues?**

A The planning effort provides the necessary information for the City to prioritize potential solution alternatives.

Q **Regarding development impacts analysis, why is an increase in flooding of 0.1-0.5 feet unacceptable when the existing flooding is already over 2 feet deep?**

A State law dictates that new development cannot adversely impact downstream property owners. City standards have defined no adverse impact as not increasing flooding by more than 0.1 foot. The City has recently made updates to the stormwater criteria manual to provide a more streamlined review process for infill development. See Slide 36 for information on the new process.

Q **Does the City plan to manage the model going forward to accurately reflect the current state of new development?**

A The model assumes the area will fully develop, so the upper extent is already known. The City does not plan to manage the model to represent each incremental development but will share the planning results with FWSI and on the City website. The model will also be available to developers to reference when planning their specific site.

<u>Additional comments offered during Q&A discussion</u>

C Near Southside stakeholders need to be advocates for the allocation of stormwater utility fee funds.

C Opening storm drain systems to a stream bed as part of a development could be one way to leverage private funding.

C We could come up with drawings or renderings of potential solutions as in initial talking point to build interest and potential partnerships with developers.

C Property along the potential channel daylighting alternative could be re-platted to enable development adjacent to the new channel