

Linwood Flooding Update 03.22.23

-Summary 03.16.23 Rain Event

March 16, 2023 Rain Event Summary

Two back to back fronts impacted Fort Worth.

- 1st – between ~4:00-4:30 pm, moved west to east with most of the intensity in a line across the city north of downtown (included the Linwood area).
- 2nd- between ~4:50-6:00 PM, moved northwest to east with most of the intensity within the loop (included the Linwood area).
- Much of the city received between 0.5” to 2” of rain over the entire storm event with the area around Lake Arlington receiving 2” of rainfall.

Based on the closest rain gauge information, the Linwood area received a little less than a 1 year event in 15 minutes (a very frequent/common rainfall), which was the most intense timeframe for the rainfall in the area- this intensity caused the storm drain system to fill to capacity and pond in the Templeton area.

- The 15 minute rainfall measured near the intersection of Belknap and Pecan Street was 0.78”. For reference, a 1-year, 15 minute event is 0.83”.

Request for Qualifications (RFQ) for engineering evaluation, project development, and design of flood mitigation improvements

- Our RFQ closed on Feb. 24 and six submittals were received and are now undergoing review and evaluation by our team to identify the most qualified consultant.
- Once identified, we will be negotiating the scope of work, schedule and fee and going to City Council to request approval to move forward with a contract.
- We are still targeting May to award the engineering contract. This will help us kick off work quickly in late June when bond funding for the work becomes available.

Templeton Flap Gate Evaluation

- We are reviewing the flap gate case study information provided by Dane Wicks on March 2nd to determine if installing the devices in the Templeton area would reduce flooding from smaller rain events, and do so without increasing flood risk to other residents in the area.
- We expect to have our evaluation wrapped up by the end of March/early April.

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Jesse D. Sandoval Park Detention Evaluation

- We have a consultant currently evaluating potential stormwater detention in the park to understand effectiveness/benefits to reducing structure flooding.
- The timeline for findings is April 2023- this information will be handed off to the engineer we contract with through the RFQ process to inform their project development effort.

Surcharging Manhole on Templeton

- We have concluded our engineering evaluation for the replacement of the northern Templeton manhole with a hydrovent. This will allow the release of trapped air/water during a surcharged event to provide system relief while keeping the manhole from coming off, leaving an open hole in the street (the purpose of the manhole replacement with a hydrovent is not to reduce flooding).
- Our evaluation determined that replacement will not make flooding worse in another location so we are going to be moving forward with the install.
- Anticipating that this could be done without making flooding worse in another location, we already ordered the hydrovent back in December and expect delivery by the end of May.
- Once the hydrovent has been received, we will reach out to the community to provide a schedule for the actual install.

Pre/Post Storm Event Inlet Check

- The Templeton inlets are included in our pre/post storm event inspection routes so they can be visually checked and cleaned as needed before/after rain events.
- The inlets were checked on the morning of Thursday 3/16 before the last rain event and a post check was scheduled for 3/17.
- We have Vactors (our field operations truck that cleans out inlets/pipes) available to respond to flooding calls we receive but we cannot stage one in the Linwood area due to the limited number we have and need to deploy them across town to respond citywide as calls come in. The purpose of the vactor truck is to clear out clogs from the storm drain system. They do not have the capacity to suck up a large volume of stormwater to reduce flood risk.
- Due to the call about flooding concerns during the event, one of the vactors responded but by the time they arrived in the Templeton area, the water had already receded and there were no blockages identified.
- Any flooding concerns should be reported to the city's call center 817-392-1234 - they can most quickly reach our field crews so they can respond as needed.