

Saint Roch Drainage Improvements and Green Infrastructure

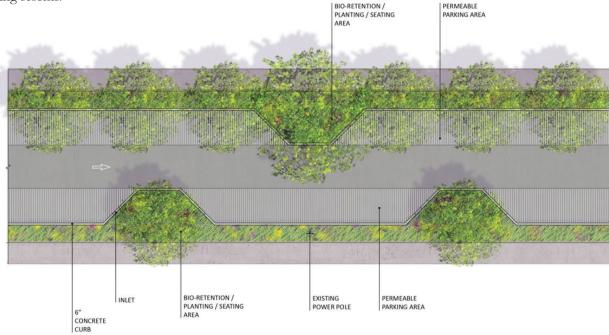
Overview

The Saint Roch neighborhood project area consists of the 26 city block section bounded by N. Roberston St. to the north, Franklin Ave. to the east, St. Claude Ave. to the south and Elysian Fields Ave. to the West. The neighborhood experiences chronic flooding from even relatively small storms, with more severe flooding associated with larger storm events. The flooding has damaged numerous homes and businesses within the neighborhood and ponded water on streets often necessitates the rerouting of traffic. The storm drain system is undersized and approximately half of the streets within the project area have little or no existing drainage infra-



St. Roch project area showing the blocks targeted for improvement.

structure. The standard approach to fixing urban drainage problems, that of installing more drainage structure pipes adequately sized to convey stormflows, will not work in St. Roch, as there is nowhere for the water to go during storms.



The Solution

Rather than attempting to convey water out of the neighborhood, the project will utilize oversized storm drain pipes for implementation under the existing streets that will provide the maximum amount of underground detention practical. The project also seeks to maximize the extent to which green infrastructure, including pervious gravel parking strips, bulb-outs with bio-retention cells, and oversized grassed islands with street trees and/or shrubberies, is utilized to improve resilience at the surface.

Why Green Infrastructure?

- Flood mitigation through infiltration and localized detention
- Reduction of urban high heat zones
- Improved aesthetics
- Traffic calming
- Water quality benefits
- Improved livability

Funding

The city has secured \$7.5 million dollars in federal funding from FEMA through the Hazard Mitigation Grant Program (HMGP). FEMA HMGP funds are to be used solely for hazard mitigation. This project will use FEMA funds to reduce flood risk from intense rainfall events by relieving pressure on the current drainage system in and around the Saint Roch neighborhood.

SPRING **DESIGN** FALL CONSTRUCTION CONSTRUCTION 2018 COMPLETED

Residents and businesses in Saint Roch should exercise caution when driving, bicycling or walking near active construction sites. Residents can expect to experience temporary construction inconveniences such as limited access to areas within the construction zones, detours, movement of heavy equipment, safety signage and sounds. In general, construction crews will be working from 7 a.m. to 5 p.m., Monday through Friday.





Many of the narrow historic streets in St. Roch are pavement from stoop to stoop.

Projected flooding in St. Roch without improvements

Conclusion

For the neighborhood of Saint Roch, the project represents the opportunity to realize renewed and transformative streets with underground stormwater detention and "at the surface" green infrastructure which will greatly improve streetscape aesthetics and the quality of life in the neighborhood.

Capital Improvement Program

The City and Sewerage and Water Board of New Orleans are working together to implement an unprecedented capital improvement program to restore the City's damaged infrastructure. Using

a combination of local and Federal funds, the \$2B program will be the most comprehensive that our region has seen in a generation. Work will include more than 200 individual projects and consist of repairing all or portions of about 400 miles of roadway. Some of these projects may feature Green Infrastructure including retrofitting and/or constructing the street with features such as underground storage, permeable/previous pavement, bioswales and/or rain gardens that combined with the existing drainage system reduces the risk of flooding in higher risk areas. For more information about the Capital Improvement Program, please visit roadowork.nola.gov.



profoundly transformative.

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