Smith Road Channel Diversion

Tojuana Cooper, PE
Manager – Capital Projects, North
Harris County Flood Control District
Harris County Flood Control District

• A special purpose district created in 1937 by the Texas Legislature

• In response to floods that devastated the Houston-area in 1929 and 1935

• Serves as a local partner to leverage federal tax dollars for flood damage reduction

• Harris County Commissioners Court serves as our board of directors or governing body
OUR MISSION

Provide flood damage reduction projects that work, with appropriate regard for community and natural values.
1. County/Municipal neighborhood drainage and HCFCD infrastructure pre-dates current criteria. Neighborhood streets are re-graded and re-constructed by the City with more inlets and bigger storm sewers to get the water out of the neighborhood faster.

2. Increased flow is mitigated in a new stormwater detention basin that HCFCD constructs in consultation with the City who then maintains the basin. Water is held in the basin and slowly released through a restricted outfall pipe.

3. The stormwater detention basin also provides greenspace and opportunities for recreation such as public parks, which the City constructs and maintains.

4. Because the increased flows are mitigated in the stormwater detention basin, the water flowing to the HCFCD maintained channel is unchanged and does not increase flooding elsewhere.
Bond Approved on August 25, 2018

- 237 projects across all watersheds
- 38 projects added based on community input ($400M+)

$2.5B Bond funds
+ $2.3B Partner opportunities
= ~$4.8B+ Total
Smith Road Channel Diversion

2018 Bond Program – Greens Bayou
- Community Engagement Meeting June 16, 2018
- HCFCD requested public input
- 44 public comments received
  - 27.5%
  - 25.0%
  - 22.5%
  - 22.5%

- Other Jurisdiction
- Stormwater Detention
- Channel Modification
- Channel Maintenance
Smith Road Channel Diversion

Jeremy Blevins, PE, CFM
Sr. Water Resources Project Manager
HDR
Smith Road Channel Diversion

• Along Smith Road South of Channel P133-00-00 and along Dory Lee Lane eastward to Channel P133-00-00

• Proposed 84” Concrete Pipe to Divert Stormwater away from Channel P133-00-00
Smith Road Channel Diversion

- **Project Purpose:**
  - To reduce flood risk along Channel P133-00-00
  - To reduce potential for future erosion along Channel P133-00-00 by reducing flow within channel
  - Improve drainage along Smith Road
Smith Road Channel Diversion

• Project Description:
  – Proposed 84” Concrete Pipe along west side of Smith Road and along Dory Lee Lane.
  – Replacement of Driveways along west side of Smith Rd. within right-of-way.
  – Replacement of Driveway Culverts along west side of Smith Road.
Smith Road Channel Diversion

West Side of Smith Road

- Replace Driveway Culverts
- Existing Gas Line to be Relocated

Proposed 84” Storm Sewer

East Side of Smith Road

- Existing 6” Gas Pipeline
- Existing 2” Gas Pipeline
- Existing 16” Gas Pipeline
- Existing 4” Gas Pipeline
- Existing 8” Gas Pipeline
- Existing 20” Gas Pipeline

60’ Right of Way

20’ Wide Pavement

Existing Pipeline Easement

PROJECT PROGRESS & COMMUNITY ENGAGEMENT

2018 | BOND PROGRAM
Smith Road Channel Diversion

• Project Benefits:
  – Reduce the potential for future erosion along Channel P133-00-00 within Fall Creek subdivision
  – Reduce the risk of structural flooding for approximately 70 structures west of Smith Road during 10% annual chance (10-year) storm event
  – Better drainage along Smith Road
Smith Road Channel Diversion Project Outlook & Next Steps
Smith Road Channel Diversion

Near Future Outlook

– Final Design Complete – October 2019
– Bidding Phase – 4th Quarter 2019*
– Construction Phase – 2nd Quarter 2020 – 3rd Quarter 2021*

* Subject to receipt of CDBG-DR Grant Funding
We want to hear from you.

Please visit HCFCD.org/C31 to learn more about the Smith Road Channel Diversion, ask questions and sign up for our mailing list.