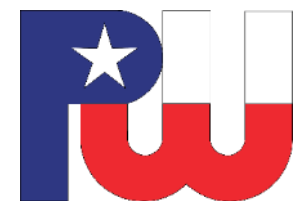


SWAT PROGRAM TTI Presentation

Steve Costello, PE
Rod Pinheiro, PE

12/11/2017



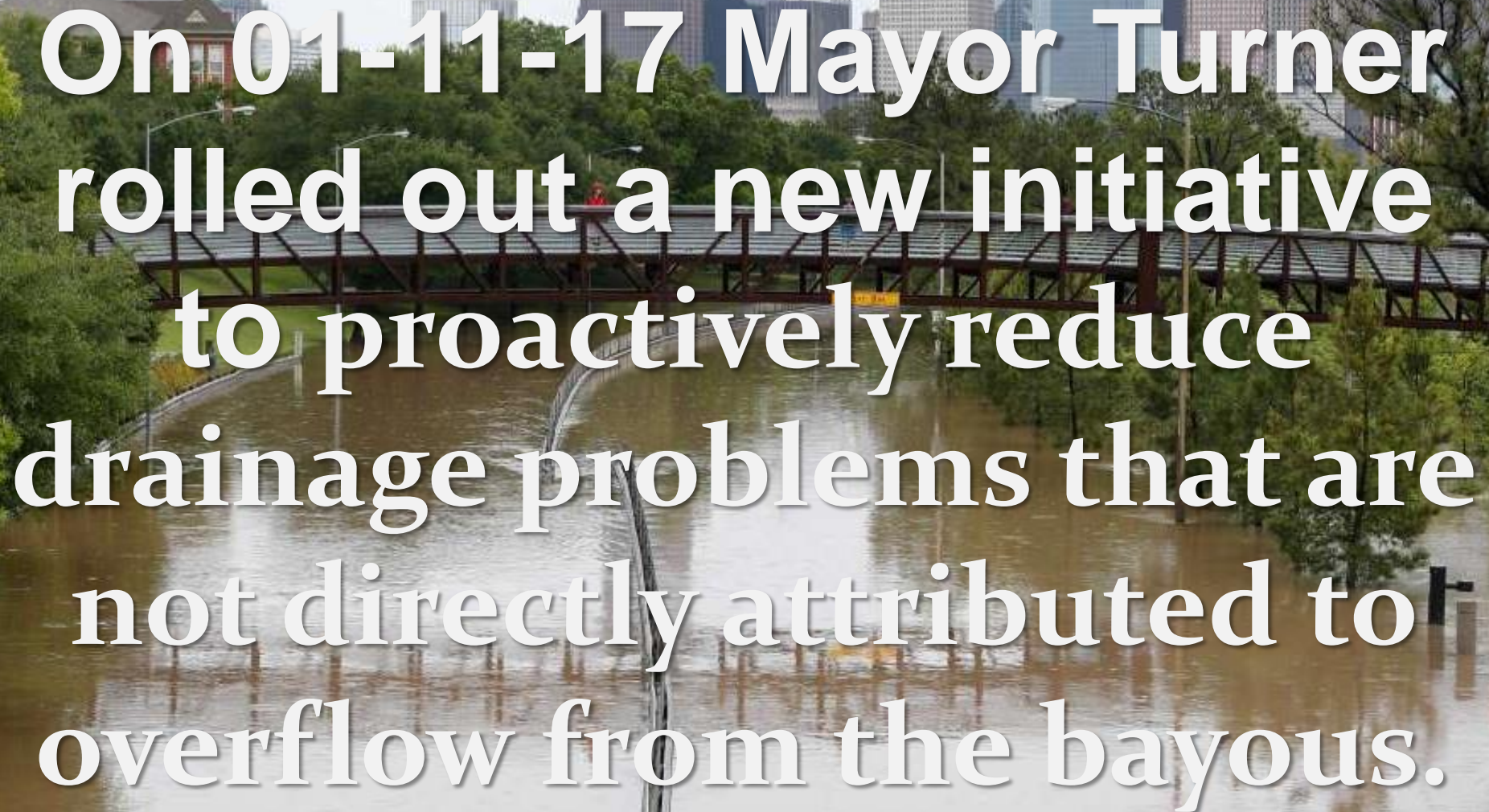


CitizensNet

The City of Houston eNewsletter



Sylvester Turner, Mayor



On 01-11-17 Mayor Turner rolled out a new initiative to proactively reduce drainage problems that are not directly attributed to overflow from the bayous.

SWAT - Storm Water Action Team

GOAL: Reduce localized drainage problems throughout the City not directly subject to riverine/ bayou overbank flooding by rehabbing/ upgrading the existing drainage system to improve conveyance of day-to-day storm events and expanding maintenance capabilities.

Project locations will be determined by reviewing 311 calls, nonriverine structural flooding locations, and known areas with drainage concerns. Projects will be developed by investigating and inspecting the system and developing an assessment/work plan for addressing the area(s) of highest need.

STORM SEWERS AND OUTFALLS:

Projects will include replacing collapsed outfalls and storm sewer components, upsizing inlets, replacing inlet plates with grates, re-establish roadway curbs and gutters for re-establishment of flow paths.

ROADSIDE DITCH:

Projects will include regrading of ditches, replacement of culverts not set to proper flowline and clearing.

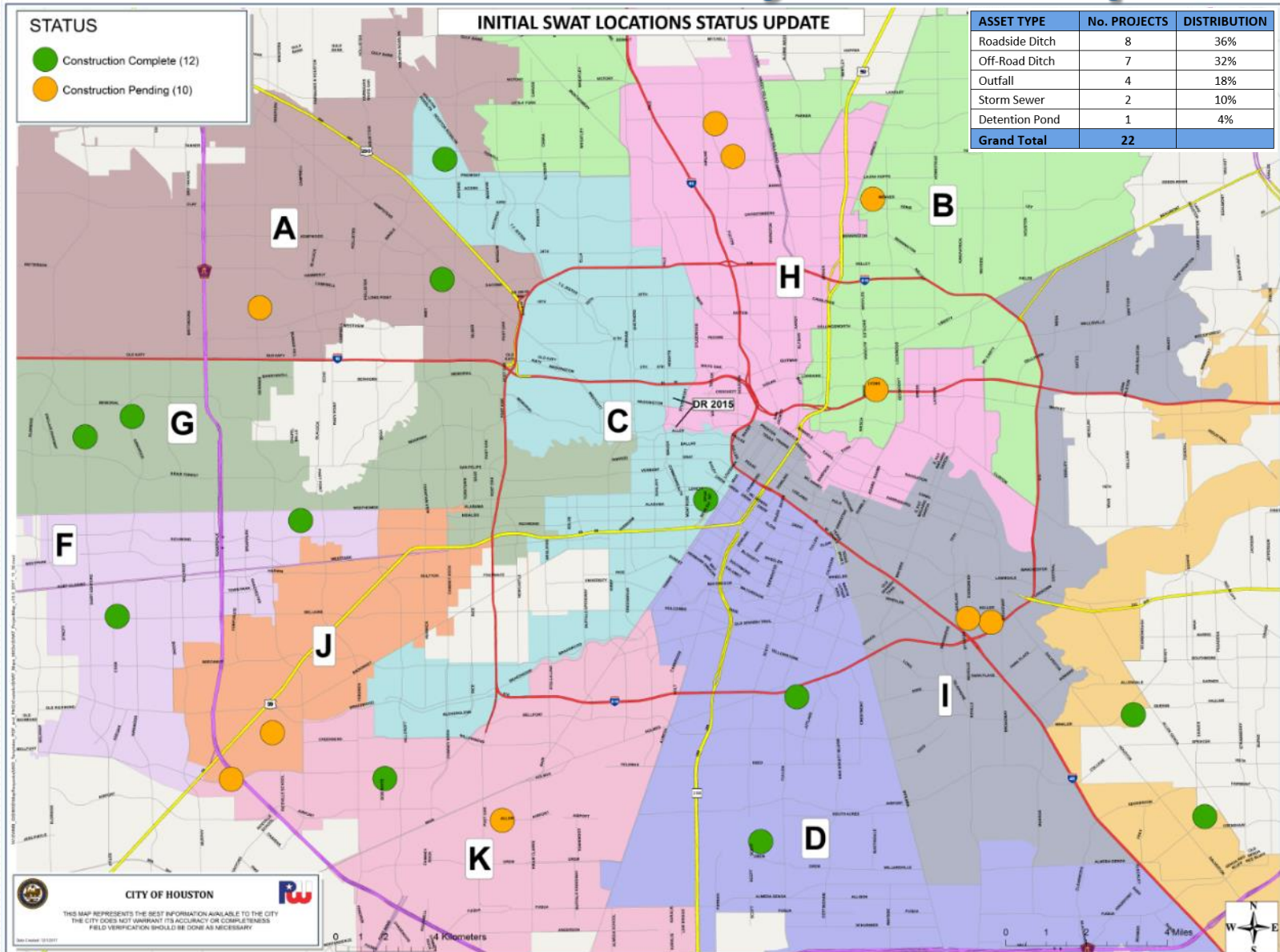
OFF-ROAD DITCH AND DETENTION PONDS:

Projects will include clearing and grubbing, regrading and desilting, minor erosion repairs, and mowing.

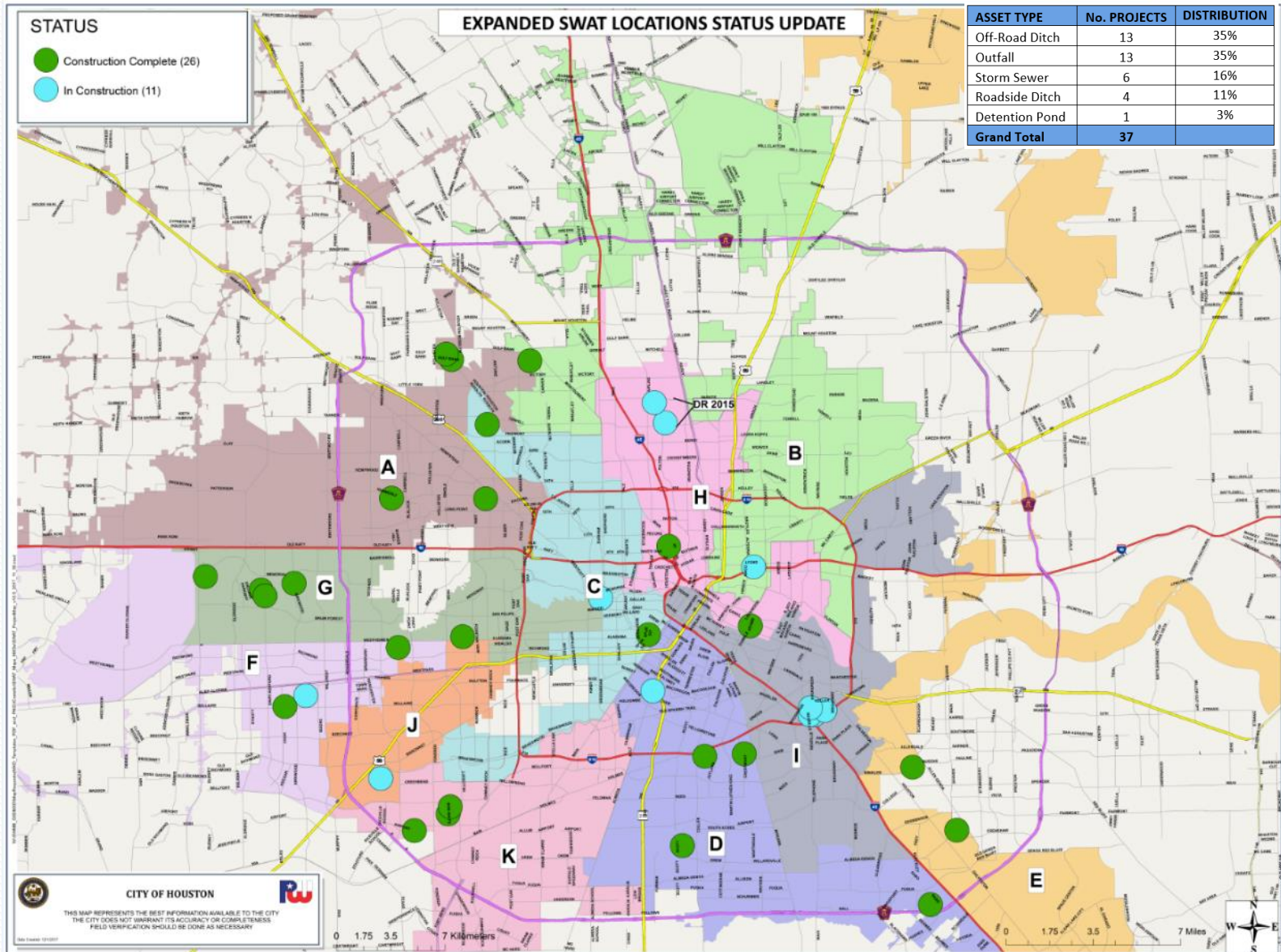
Funding:

- \$10 million approved for FY-17
- \$9 million approved on November 2017 for FY-18

SWAT Initial Projects Map



SWAT Projects Map (As of 11/30/2017)



SWAT Project Distribution

(as of 11/30/2017)

Overall SWAT Project Distribution by Asset Type

ASSET TYPE	No. PROJECTS	DISTRIBUTION
Off-Road Ditch	67	40%
Roadside Ditch	42	25%
Outfall	35	21%
Storm Sewer	19	11%
Extreme Event Swale	2	1.5%
Detention Pond	2	1.5%
Grand Total	167	



SWAT Projects Cost Estimate

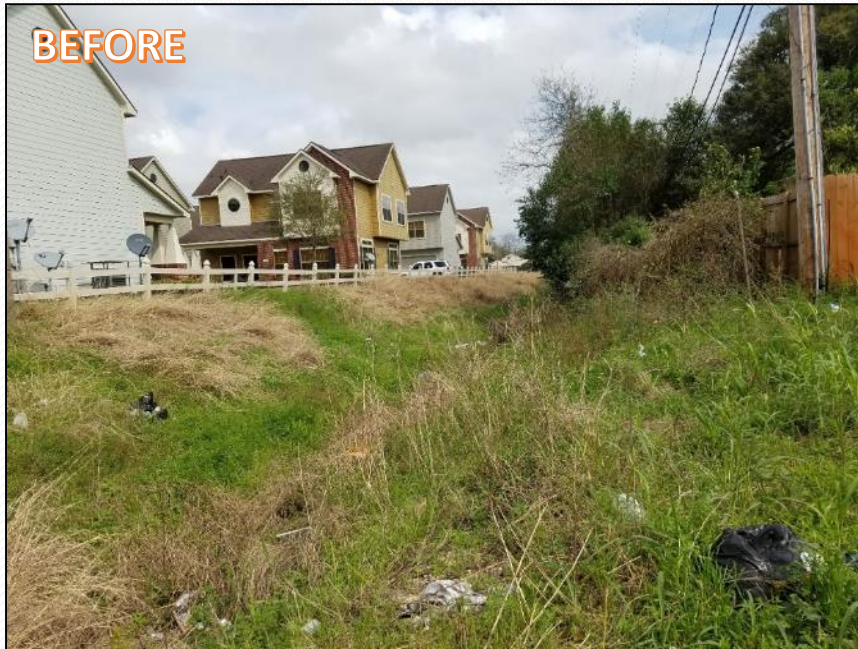
(as of 11/30/2017)

SWAT Projects	No. of Projects	Estimated Cost
Initial 22 Projects	22	\$ 6,924,494
FY-17 Additional Projects	16	\$ 1,699,095
FY-18 Forecast	61	\$ 29,608,672
FY-19 Forecast	19	\$ TBD
To be Determined	49	\$TBD
Grand Total	167	\$TBD

Off-Road Project -District D-

4007 Botany Ln.

Drainage Issues: Needs Clear and Grubbing/ Re-establishment. Ditch ID: C127-01-00-A

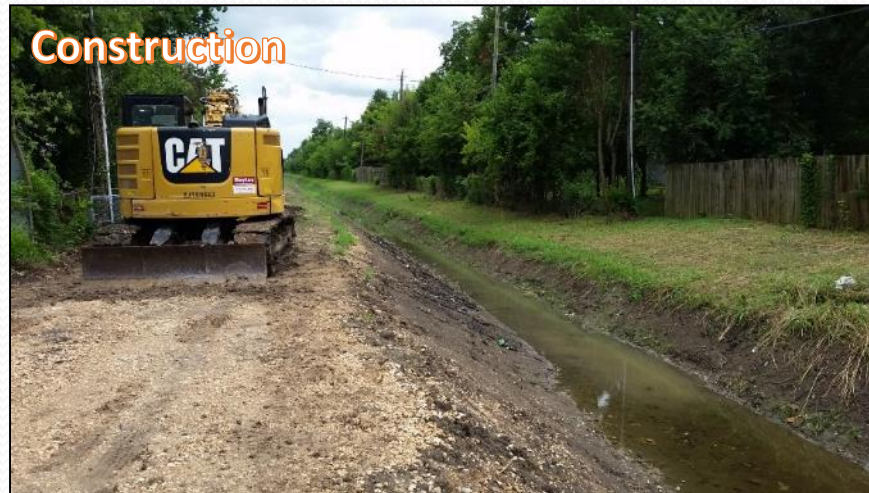


COMPLETED

Off-Road Project -District D-

7300 Calais Rd. (from Calais Rd. to St. Lo Rd.)

Drainage Issues: Needs Clear and Grubbing/ Re-establishment. Ditch ID: DUNK-00-05-A, B



COMPLETED

Off-Road Project -District E-

2440 Albright Dr. (from Leprechaun St. to Martinville Dr.)

Drainage Issues: Needs Clear and Grubbing/ Re-establishment

Ditch ID: C106-05-00-A



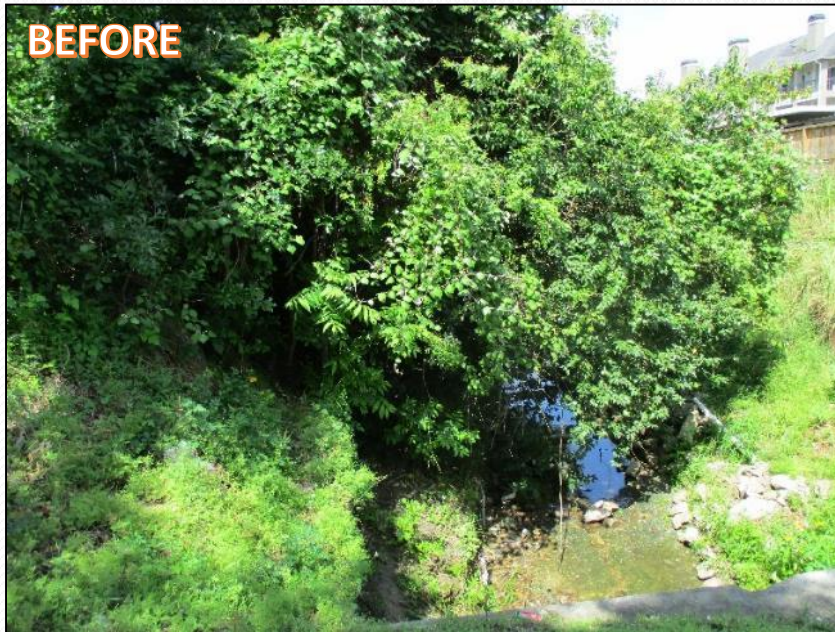
COMPLETED

Off-Road Project -District F-

Tanglewilde - Westmont Area (from Jeanetta St. to Westerland Dr.)

Drainage Issues: Needs Clear and Grubbing/ Re-establishment

Ditch ID: W147-00-00-A



COMPLETED

Off-Road Project -District H-

4989 Sharman (from 610 to Kelly St.)

Drainage Issues: Needs Clear & Grubbing/ Re-establishment

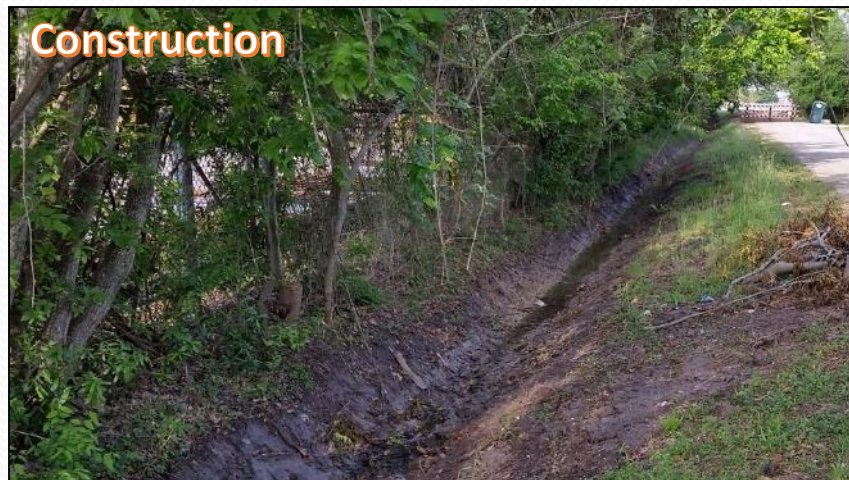


COMPLETED

Roadside Ditch Project -District E-

531 Keith Ave. (From S. Shaver St. to Mize Rd.)

Drainage Issues: Needs Clear and Grubbing/ Re-establishment. Ditch ID: C106-08-04-A



COMPLETED

Roadside Ditch Project -District K-

Cambridge Village Park

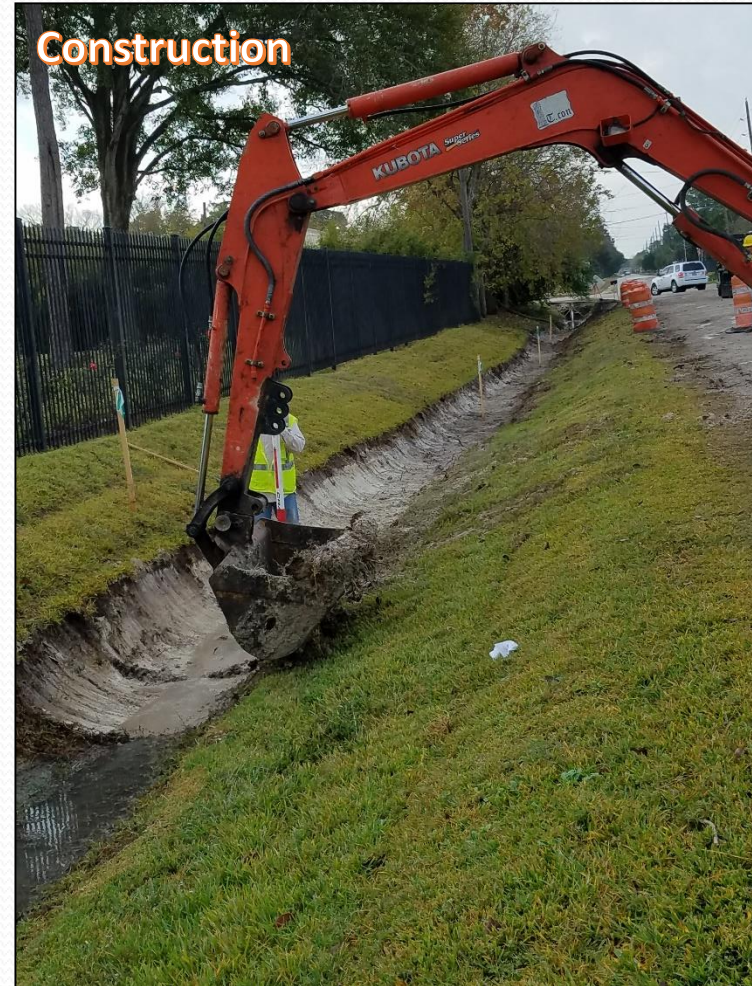
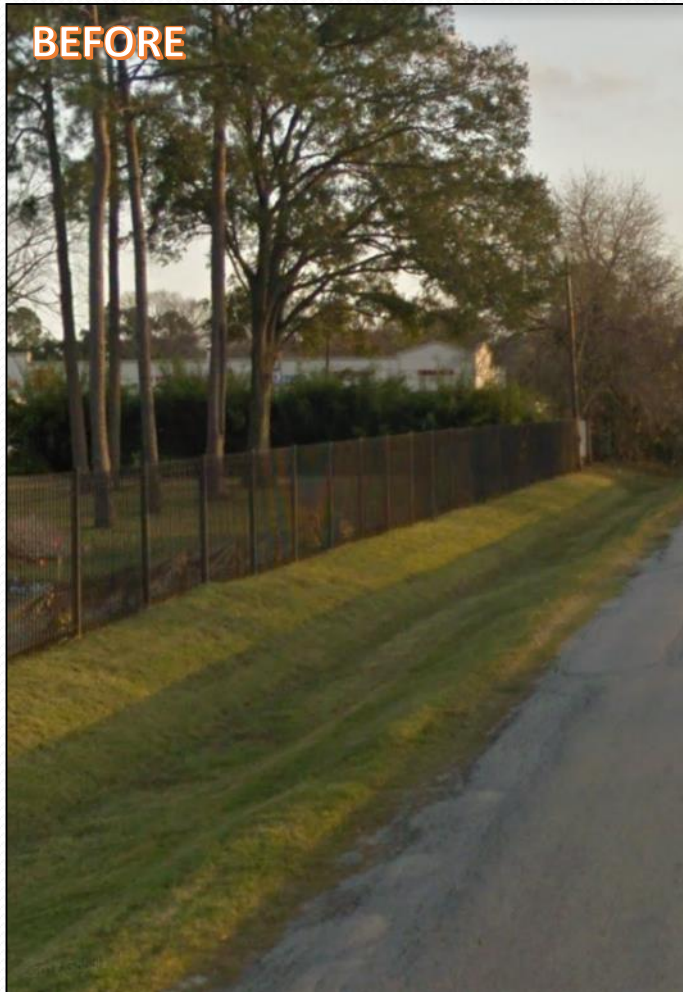
Drainage Issues: Culverts undersized, collapsed or not set to proper flow line



Roadside Ditch Project -District J-

Bedford

Drainage Issues: Culverts undersized, collapsed or not set to proper flow line



Outfall Project -District A-

9719 Deanwood Street

Drainage Issues: 24-inch outfall has collapsed & fix headwall



COMPLETED

Outfall Project -District C-

5942 Greenmont Dr.

Drainage Issues: 36-inch outfall has collapsed and caused cave-in



COMPLETED

Outfall Project -District D-

11906 Kirkholm Dr.

Drainage Issues: 24-inch outfall has collapsed and caused cave-in



COMPLETED

Outfall Project -District G-

Pinesap at Terry Hershey Park
Drainage Issues: 72-inch outfall cave in



COMPLETED

Storm Sewer Project -District C-

3600 Flora St.

Drainage Issues: Existing culvert/grate failure blocking proper drainage



COMPLETED

Storm Sewer Project -District H-

Houston Ave. & North St.

Drainage Issues: High water ponding at intersection near school; re-establish culvert across intersection

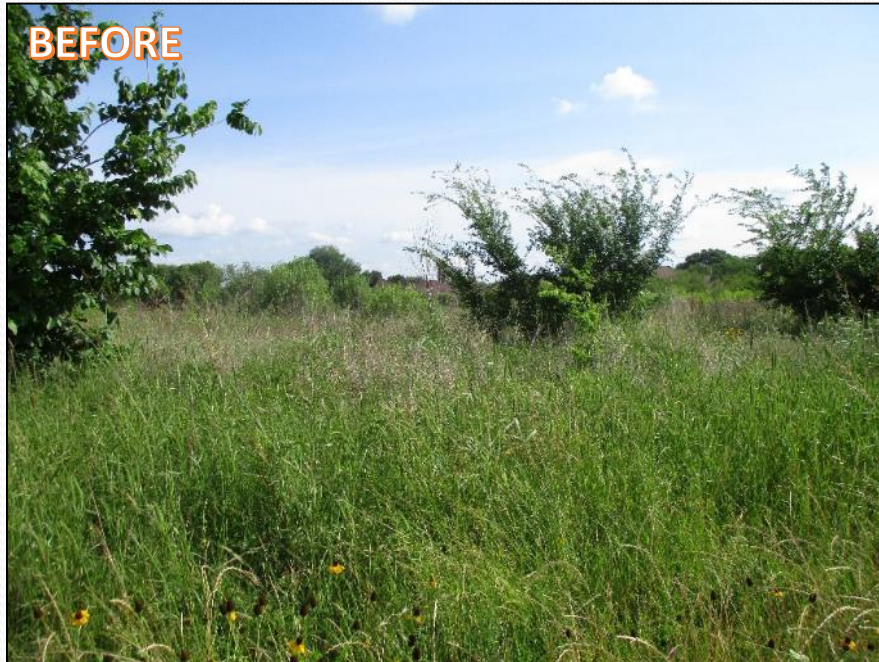


COMPLETED

Detention Pond Project -District F-

Bellaire West Detention Pond

Drainage Issues: Needs Clear and Grubbing/ Re-establishment



COMPLETED

Ideas for potential SWAT projects in your district?

Contact:

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Sallie Alcorn, 832-393-1123, sallie.alcorn@houstontx.gov