Sjolander Road
A Harris County Low Impact Development Roadway Project

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Sjolander Road– Harris County Precinct Two

- North of I-10 East, close to Baytown
- Adjacent to a proposed Chevron facility expansion
- A project by Harris County Precinct Two
Existing Conditions

• Two lane asphalt roadway with roadside ditches
• Twenty-six pipelines and a SJRA water canal cross the roadway
• Two outfall locations to existing channel systems
Challenges

Pipelines, Pipelines, Pipelines, and a Water Canal
Proposed Design

- Four lane concrete roadway, about 1 mile
- Bioswale drainage system on western edge
- Minimal storm sewer for outfalls only
Design Elements
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• High Performance Engineered Soil at outfall locations
Landscape Design

- Little Bluestem
- Bushy Bluestem
- Yaupon Holly
- Mexican Hat
- Plains Coreopsis
- Bald Cypress
Economics & Benefits

- The LID design allowed for roadway expansion to occur with minimal impacts to the pipeline corridor.
- Cost savings of the lid design compared to a traditional approach with storm sewer & offsite detention was astronomical.

- Estimated Traditional Cost:
  - Road, Detention and Storm Sewer $4.7 M
  - Pipeline adjustment (500Keach) $13M
  - Water Supply Canal Extension $0.85M
  - Total $18.55 M

- Project Bid w/ LID:
  - Total $3.8 Million
  - No water supply canal extension required
  - No pipeline adjustments required
  - No offsite detention
Questions and/or Comments