

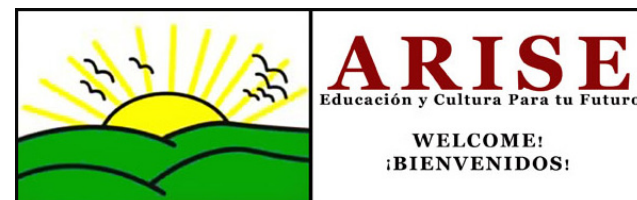


## **“Building Power in Colonias Through LID”**



The **buildingcommunity**WORKSHOP is a Dallas based nonprofit community design center seeking to improve the livability and viability of communities through the practice of thoughtful design and making. We enrich the lives of citizens by bringing design thinking to areas of our city where resources are most scarce. To do so, the **bc**WORKSHOP recognizes that it must first understand the social, economic, and environmental issues facing a community before beginning work.

## Partners

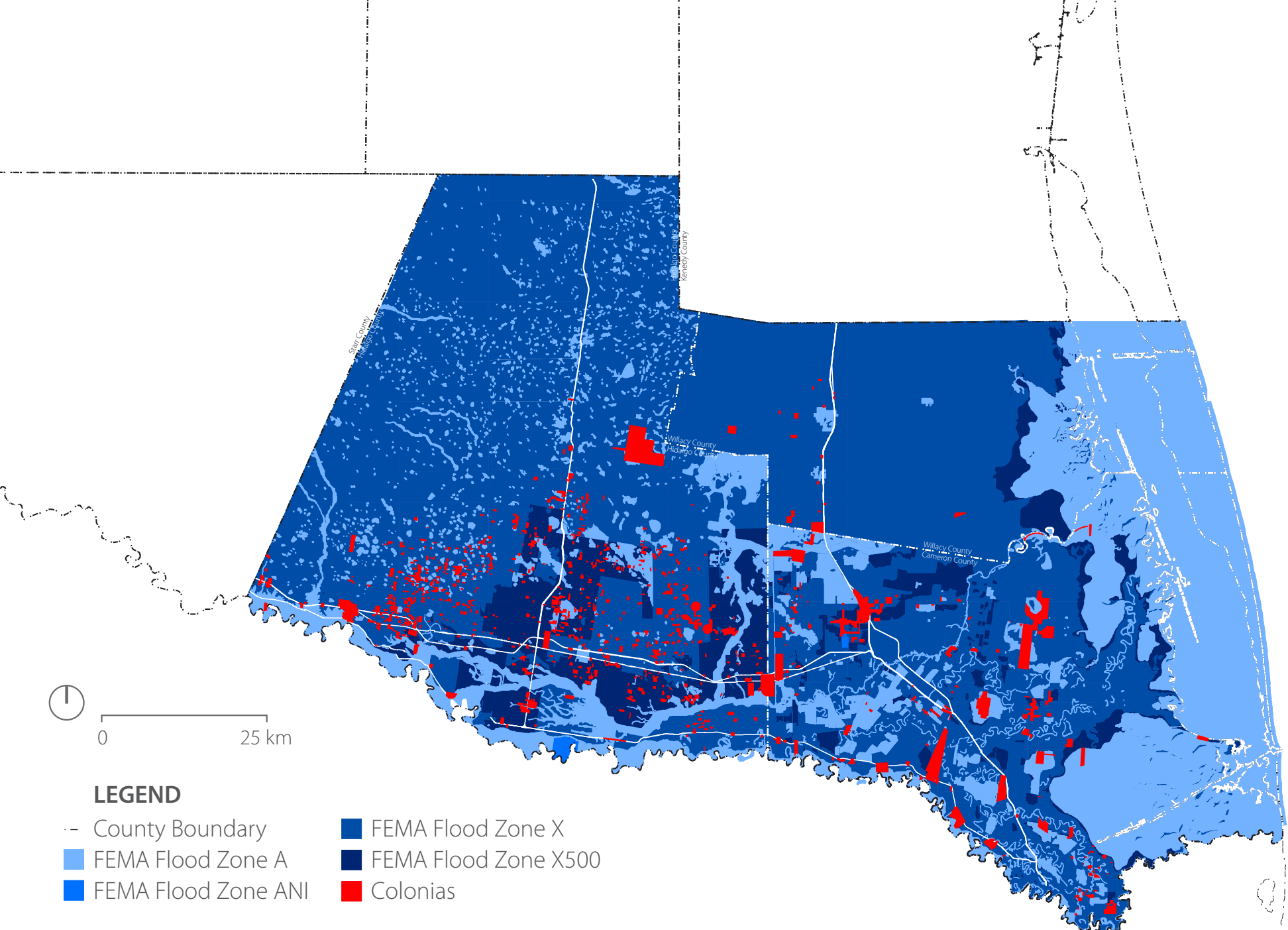


# bcWorkshop + Colonias in the LRGV

## Colonias

The term “colonia,” in Spanish means a community or neighborhood.

The Office of the Secretary of State defines a “colonia” as a residential area along the Texas-Mexico border that may lack some of the most basic living necessities, such as potable water and sewer systems, electricity, paved roads, and safe and sanitary housing.



# Hidalgo, Cameron, Willacy Counties FEMA Flood Zones



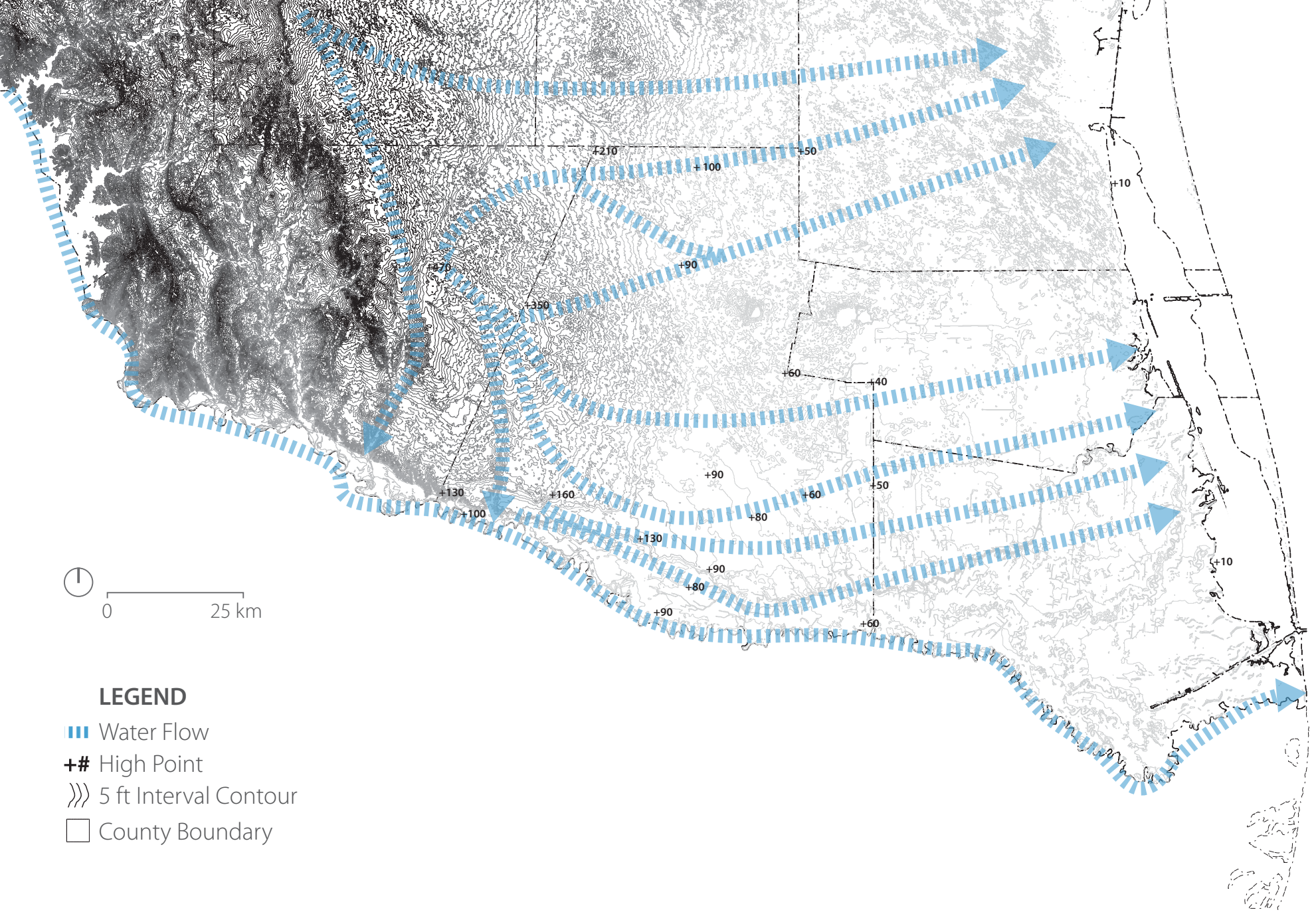
How can we address drainage in a **multifunctional** way that benefits residents, counties and the environment?



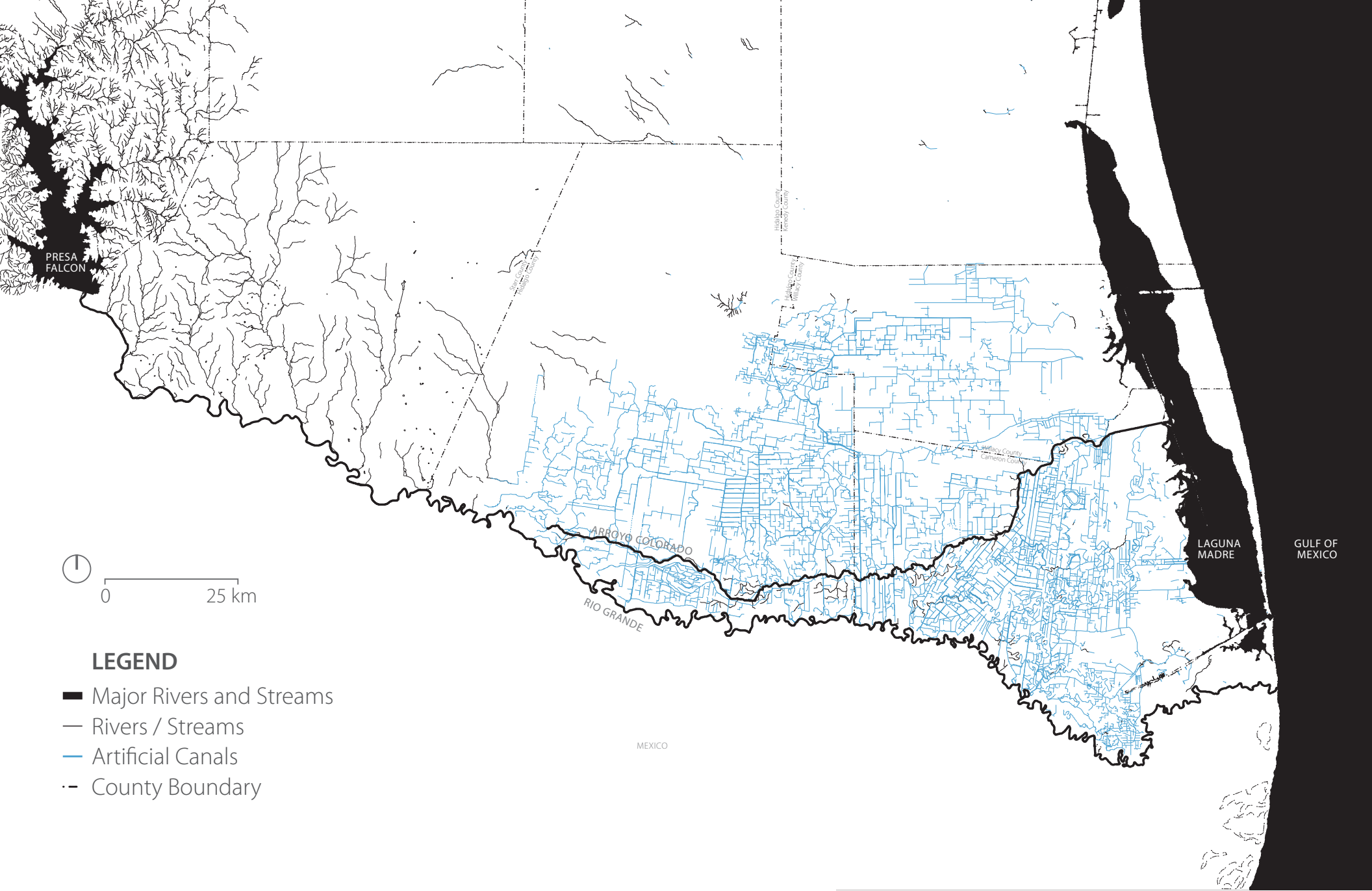
**Goal:** Empower residents to advocate for drainage systems that best fit their needs while addressing other challenges such as the lack of common gather spaces

# 1. Education

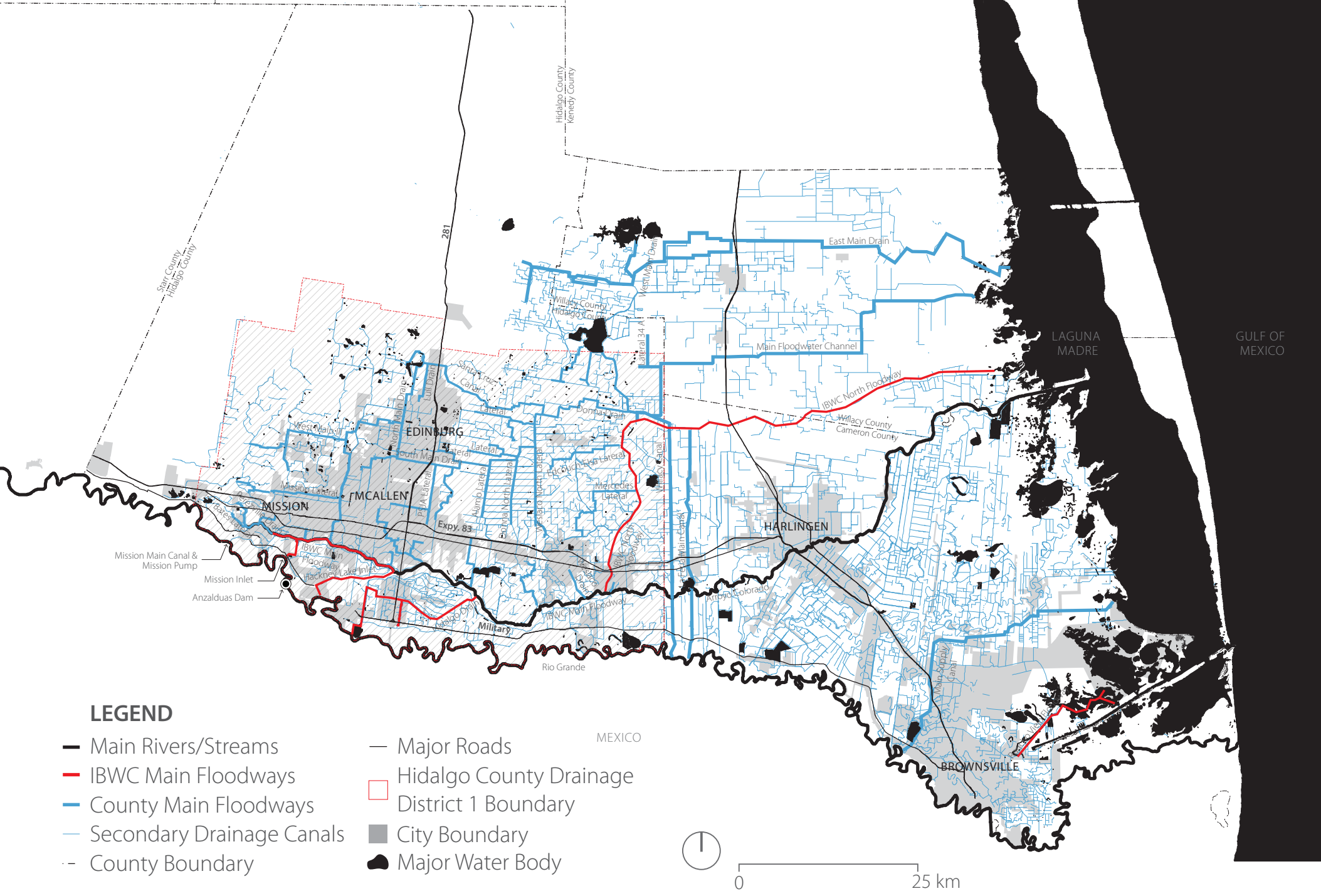
Regional Drainage,  
County Drainage,  
Colonia Drainage



# Topography and Natural Water Flows



# LRGV Regional Drainage System



# Hidalgo, Cameron, Willacy Counties Drainage System

## **2. Political Outreach**

**Drainage District,  
County,  
Precincts,  
Community,  
Planners and Designers**



## STATE

## COUNTY

County Precincts

Planning Department

Drainage District(s)

Other Governmental Organizations

## COMMUNITY

Community Organizations

Colonia Leaders

Colonia Residents

## Designers and Planners

Engineers

Architects/Landscape Architects

Developers

## **Challenge:**

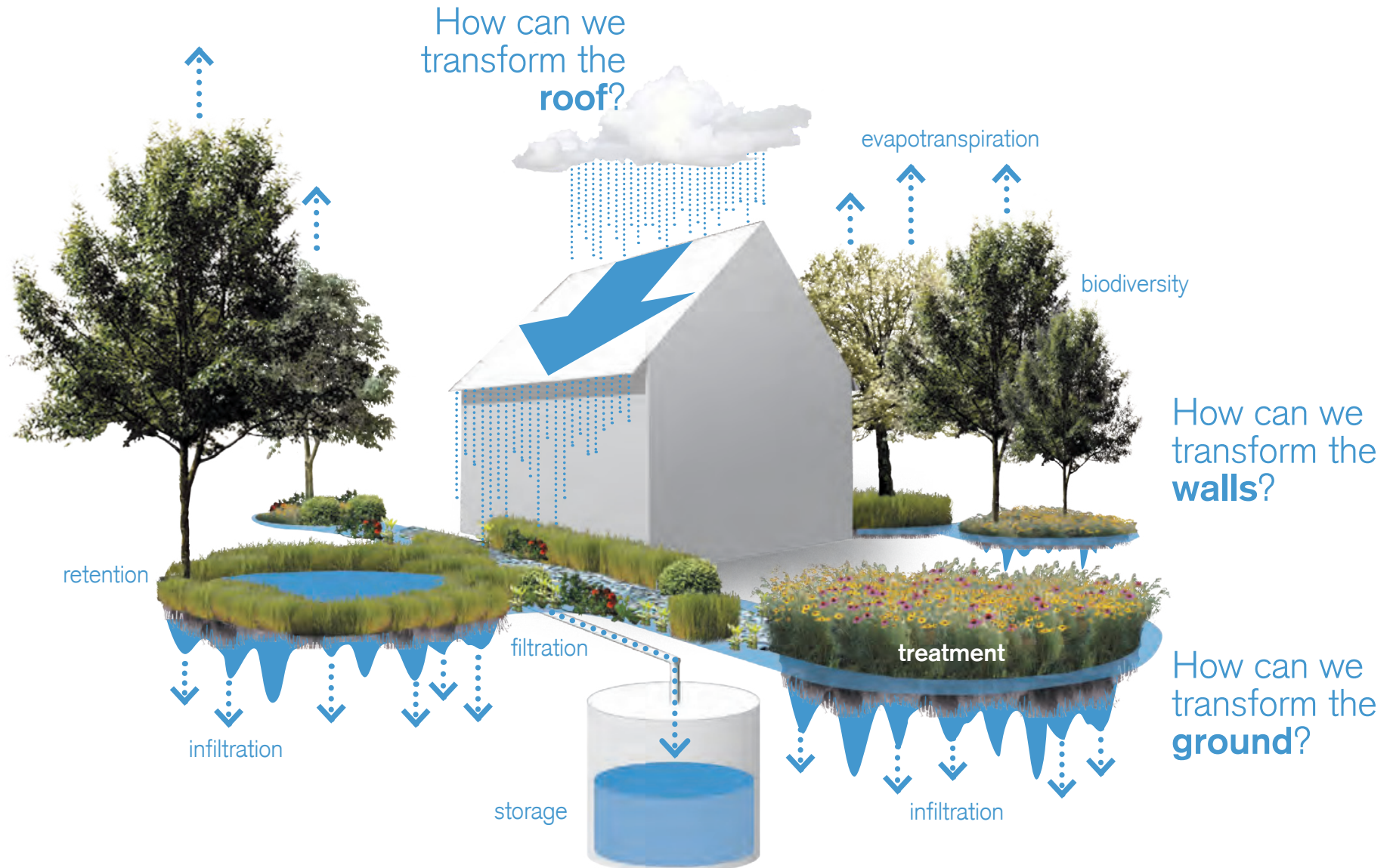
**How to coordinate and collaborate with Government officials to make this a reality?**

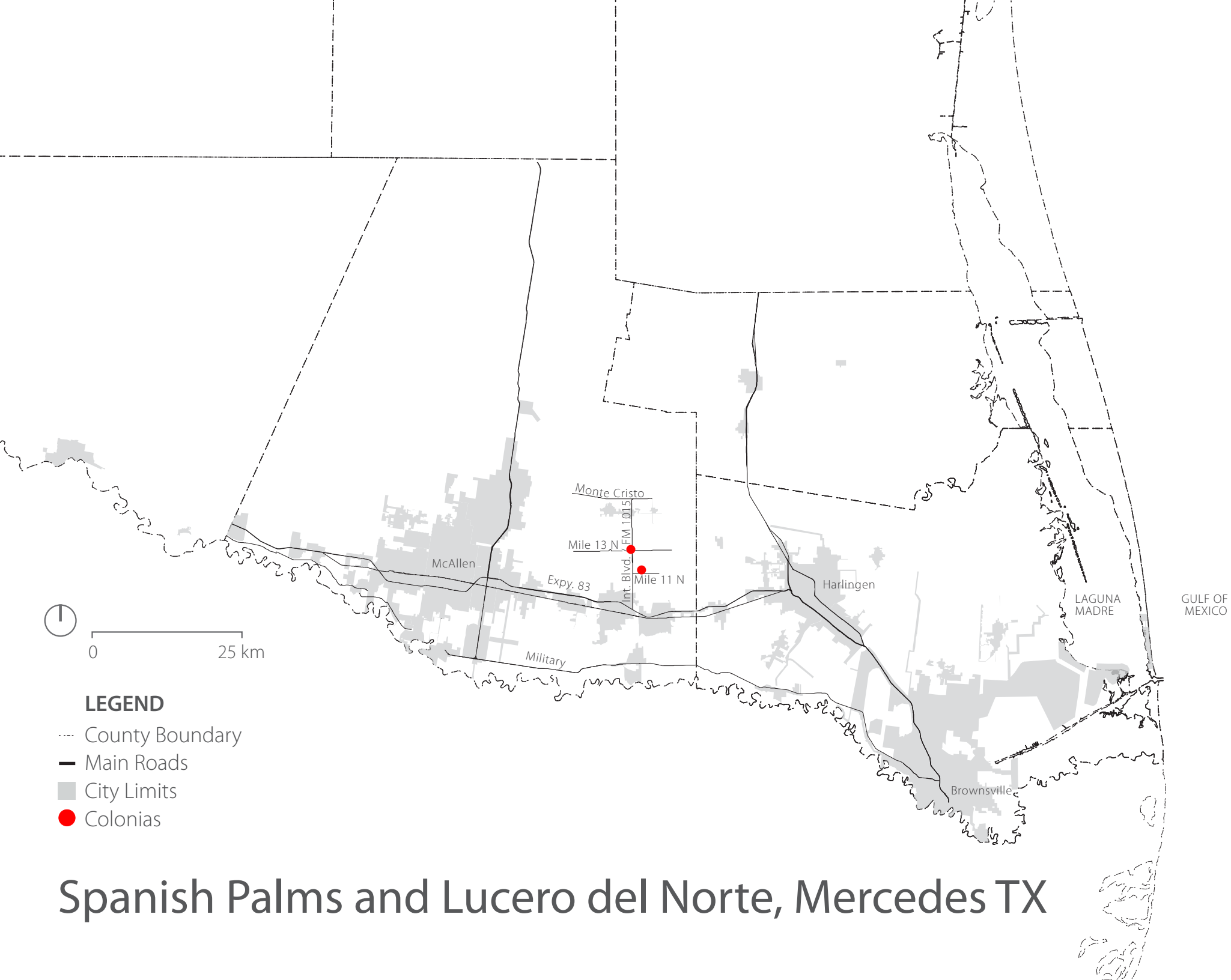
**How can we work together in developing drainage strategies that alleviate pressure to the regional drainage system while improving quality of life to low income communities?**

## **3. Inclusive Design**

**Community Engagement  
Low Impact Development  
Plan and Design**

# Low Impact Development - Education and Strategies





# Spanish Palms and Lucero del Norte, Mercedes TX

# Spanish Palms



Flooded ROW

# Engagement



# Spanish Palms



Understand flooding + drainage conditions with the community's input

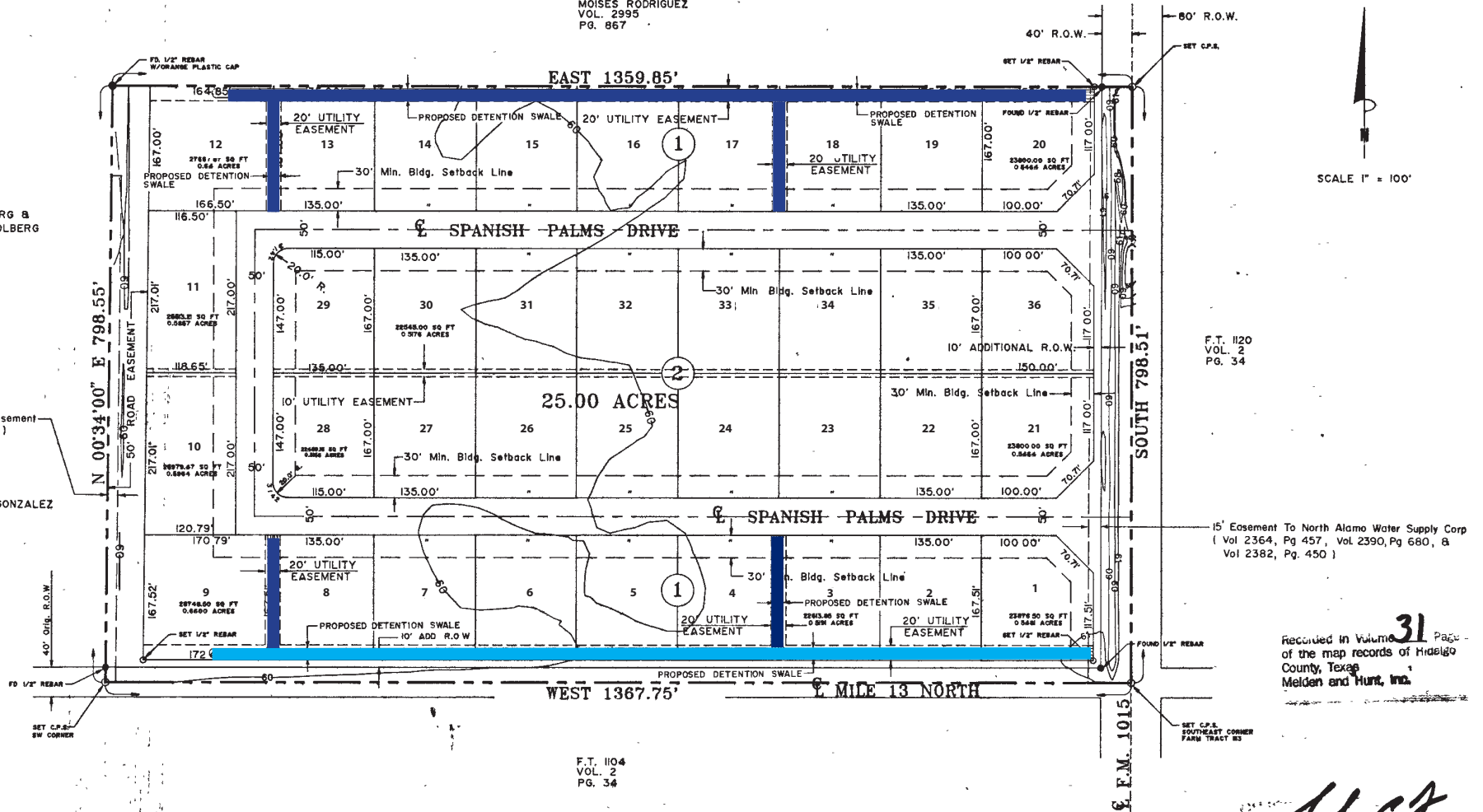
# Spanish Palms

MOISES RODRIGUEZ  
VOL. 2995  
PG. 667

LESTER H. KOLBERG &  
MARVIN LEROY KOLBERG  
VOL. 1176  
PG. 99

12' x 678 2/3' Road Easement  
( Vol 2107, Pg 755 )

ALBERTO GONZALEZ  
VOL. 3249  
PG. 175



SCALE 1" = 100'

F.T. 1120  
VOL. 2  
PG. 34

15' Easement To North Alamo Water Supply Corp  
( Vol 2364, Pg 457, Vol 2390, Pg 680, &  
Vol 2382, Pg. 450 )

Recorded in Volume 31 Page  
of the map records of Hidalgo  
County, Texas  
Melden and Hunt, Inc.

F.T. 1104  
VOL. 2  
PG. 34

## SPANISH PALMS SUBDIVISION

BY: *ALC*  
5-16-96

### Details:

24 acres

36 lots

Existing retention swales

No curb and gutter

Altered or non existent swales

Existing Swale



Flooded property - Spanish Palms, Mercedes TX



Private property - Spanish Palms, Mercedes TX



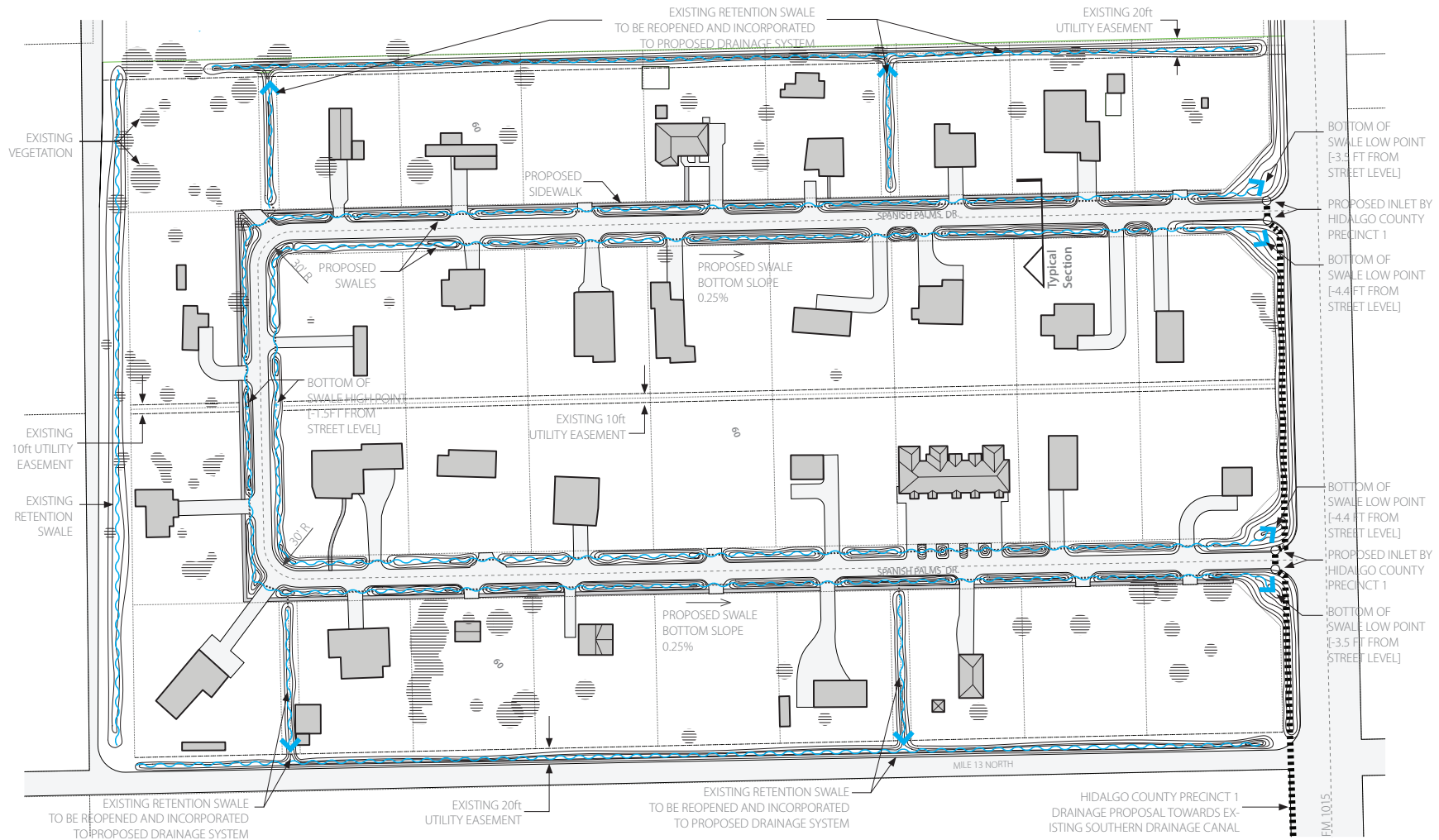
Filled Private Properties - Spanish Palms, Mercedes TX



## Design Engagement

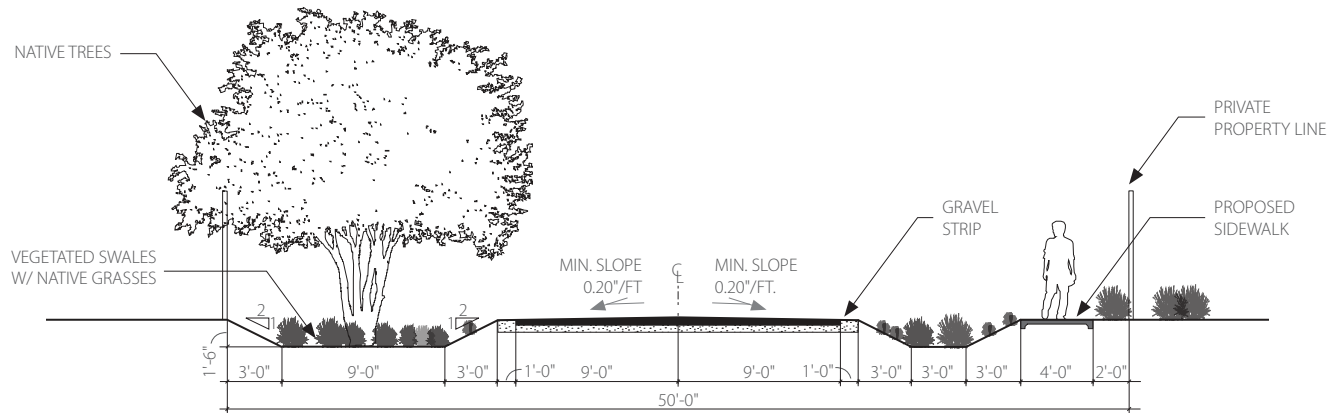
Prioritize community needs  
Sharing ideas and designing with the community

# Spanish Palms Colonia Proposed Drainage Layout



## Strategies:

- Existing swales improvements
- Reducing Street width
- Addition of vegetated swales
- Sidewalk





Making drainage infrastructure...

# a community asset



Vegetated swales  
Bioretention

Native vegetation  
Erosion Control

Pedestrian accessibility  
Traffic calming

**THANK YOU**