

## *3005 Elevation Project*

**Highway:** FM 3005

**CSJ:** 0051-09-024

**Project No.:** NH 2019(988)

**Length:** 18.7 Miles

**Limits:** from the End of the Seawall to the San Luis Pass bridge

**Description:**

- Raising the Roadway to Elevation 7.5 ft and 1.5” Surface Overlay
- Cross Culverts: Replace and Clean Existing Storm Sewer
- Roadside Drainage: Cleaning Ditches and Replacing Driveway Culverts
- Cleaning Existing Outfalls
- Upgrading Traffic Signals: 12-Mile Rd, Park Rd 66, & San Jacinto Dr
- Safety Upgrades
- Sodding
- Replace Signs
- Pavement Markings

**Contractor:** Angel Brothers Construction Company

**Cost:** \$35,347,635

**Dates:** Construction begins August 19, 2019 and Ends by March 2022

**Duration:** 30 months

## ■ Drainage System

- Designed to convey during a 10-Year Storm event
- Culverts are checked using the 100-yr flood event to ensure System structural integrity.

## ■ Roadway Design

- The storm surge elevation for the 5-year event was found to be 5.7 ft
- The storm surge elevation for the 10-year event was found to be 6.8 ft
- Edge of Pavement was designed that storm water won't top the roadway during a 100-yr storm event

## ■ Roadside Drainage

- Flow lines adjusted to provide positive drainage.
- Outfalls will be cleaned to designed flow lines

# Conclusion and Recommendation

- With the sandy climate on Galveston Island, the soil within the parallel ditches have moved and settled. The parallel drainage was designed to “clean up” the movement that has happened over time and provide for positive drainage towards the outfall.
- The tidal study used the latest recorded water level and wave data from the nearest recording station at Galveston Pleasure Pier. Among others, the data included tidal information from Hurricane Ike (2008) and as far back as Hurricane Carla (1961). The results of the tidal study were used to set the roadway elevation. A **7.5 ft** PGL elevation was chosen which is between a 25-year and 50-year water level without wave runup. Areas where the PGL was already greater than 7.5’, receive the 1.5” overlay.

- **Call with Questions or Concerns**
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