



Drainage Design

Our drainage design experience includes hydrologic and hydraulic analysis and design of existing and proposed drainage systems for highway projects that includes open and closed storm sewer systems, detention ponds, storm water quality BMPs, scour, erosion and sediment control, culverts and bridge class culverts and coordination with agencies such as FEMA and local flood plain administrators for various locations in Texas.

Drainage services include:

- Hydrologic and Hydraulic analysis
- H&H Report
- Ditch Layout Design
- Storm Sewer Design
- Hydraulic Calculations and Data sheets
- Detention Pond Design
- HEC-RAS, HEC-HMS Analysis, HY8
- Geopak drainage
- Winstorm
- Detention pond routing



Closed Trunkline Drainage System

Our drainage design experience includes the following projects:

- FM 664 Bridge H&H Studies (FEMA Zone AE), TxDOT Dallas
- FM 1960 Widening and Storm System Design, TxDOT Houston
- FM 2268 (Main Street) Storm System Design, TxDOT Waco
- FM 1425/FM 510 Culverts Replacement, TxDOT Pharr
- IH35W-3B PS&E, TxDOT Fort Worth
- SL 360 PS&E, TxDOT Austin
- US 183 Super 2 PS&E, TxDOT Brownwood
- SH 150 Super 2 PS&E, TxDOT Lufkin
- Fort Bend County Westpark Tollway, SH 99 to FM 1463, FBCTRA*



Multiple Box Culvert

* denotes staff experience while with another firm