



CASE STUDY

Inverness Forest Levee

LOCATION: Houston, TX

PROJECT TYPE: Design Assistance, Product Supply, & Installation

PRODUCT USED: HDPE Geomembrane Liner, Geocell, Nonwoven Geotextile



CHALLENGE:

The Harris County Flood Control District faced significant erosion along a sloped embankment, which led to frequent flooding in the neighboring community. A permanent, long-term solution was necessary to stabilize the embankment and prevent future erosion. This project was particularly high-profile due to Harris County's status as Texas's largest county and extensive flood control infrastructure.



TITAN SOLUTION:

The installation process began with a base layer of 60 mil HD liner, which had to be installed at final grade and in dry conditions. This step was critical to ensure the liner's long-term effectiveness and durability. The geotextiles were then installed over the liner, a relatively straightforward process. The geocell installation, however, required careful customization due to the varying slope lengths, which ranged from 50 to 80 feet.



ACHIEVEMENT

Despite facing weather-related challenges, including frequent rainouts, Titan successfully completed the project. The team stabilized the embankment, enhancing flood protection for the surrounding community. Through effective coordination with stakeholders and rigorous quality oversight, the project met all technical and regulatory benchmarks.