CASE STUDY

BASE STABILIZATION

PIPE STORAGE YARD Houma, Louisiana, USA GEO PRODUCTS, LLC | ENVIROGRID® GEOCELL

Background

Onshore Contracting was hired by a major offshore drilling company to stabilize their outdoor storage yard in Houma, LA which is southwest of New Orleans and not far from the Gulf of Mexico. This storage yard was located in a very low, marshy area with a water table less than 2 feet below the surface.

This storage yard is used to store and transfer steel pylons that weigh up to 250,000 lbs each. Extremely heavy duty forklifts are required to move something that large. With the combination of the heavy equipment/material and poor subgrade, the challenge was to find a solution that could not only stabilize the sub-grade but withstand the traffic flow of heavy machinery.

Technical Information

MATERIALS USED:

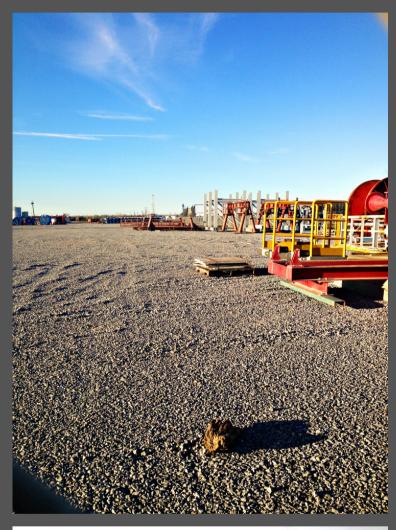
EnviroGrid® EGA 30 6" Non-woven geotextile Crushed, Recycled Concrete Layer

TIME FRAME:

Completed in 8 days



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Construction Overview

Most of the organic materials were removed and the remaining sub-grade was compacted. All excess water was directed away from the site and a non-woven geotextile was installed to provide a separation layer. A biaxial grid was laid on top to provide additional reinforcement. The 6" EnviroGrid® was deployed and filled with 8" of crushed recycled concrete. An additional 2-4" of high quality aggregate was used as a wearing surface for the heavy equipment that would be on the rolling course.



Results

EnviroGrid® Geocell was chosen in order to save installation time and cut costs on infill material needed and future maintenance. Alternative options would have involved 200%-300% additional aggregate and at least double the time to complete installation. Daily, this storage yard has a high volume of 50,000 lb forklifts moving material up to 5 times the weight of the forklift. Almost no rutting has been noticed and the EnviroGrid® goecell is outperforming expectations.

