

Texas Highway Projects Use Stormceptor for Cost-Effective Sustainability

There are millions of miles of highway stretching across America, many due for expansion and repair over the next decade. With local economies suffering and budgets cut back to bare bones, what is the most cost-effective way to ensure environmental compliance – and save money – on highway construction projects?

Across the State of Texas, the answer is Stormceptor.

Peak Performance – and Affordability

Approved by both the Texas Department of Transportation (TxDOT) and the Texas Commission for Environmental Quality (TCEQ), Stormceptor systems provide continuous positive treatment of total suspended solids (TSS) and containment of dangerous spills under even the harshest conditions.

In addition to its stormwater treatment capabilities, Stormceptor is also uniquely cost-effective. Unlike treatment ponds or swales, Stormceptor systems do not require additional capital outlay for land or right-of-way expenditures. By switching from detention and treatment ponds to Stormceptors, municipalities do not need to acquire additional land.

In one project for a local county, for example, the use of Stormceptor technology reduced the cost of obtaining additional right-of-way by \$4 million.



Imbrium Stormceptors are an affordable solution for Texas highway and road sustainability projects

Protecting a Critical Aquifer

Covering over 4,350 square miles and 11 counties, the Edwards Aquifer is the sole source of drinking water for over 1.7 million residents in this growing region of south-central Texas. Stormceptor was found to be ideal for protecting the Aquifer's recharge zone (the area where surface water enters the aquifer).

“In addition to being the drinking water source for San Antonio, the Edwards Aquifer springs are also habitats for several endangered species, so we're trying to protect both drinking water quality and threatened species,” said Dr. Michael Barrett of the Center for Research in Water Resources, University of Texas, who assisted the TCEQ in reviewing and approving Stormceptor systems.

Stormceptor Systems protect the region by maintaining continuous positive treatment of total suspended solids (TSS), regardless of flow rate. They capture and contain a wide range of particles, as well as free oils, heavy metals, hydrocarbons and nutrients that attach to fine sediment.



Highway Projects in the Edwards Aquifer Region

Many counties and cities within the Texas' Edwards Aquifer region have either installed or include Stormceptor Systems when permitting their new transportation projects.

The Cities of San Antonio and Austin have both purchased Stormceptors for numerous highway and road projects, preferring Stormceptor over other technologies due to several design features. These include: AASHTO HS-20 highway live loading, its use as a junction structure, and the Stormceptor's small, compact footprint.

For these municipalities, cost-effectiveness and sustainable performance have been a key factor. Indeed, planners have found that the Stormceptor's design features integrate with the geography of the region to provide consistently high performance under all conditions.

The I-35 Project: Affordable Spill Protection

Stormceptor Systems have also been installed along I-35 at the San Marcus River to protect against hazardous materials spills.

Stormceptor has a proven record of capturing pollutants at the source, during traffic accidents, as well as ordinary spills that occur each day along heavily-traveled routes.

Its ability to meet water quality standards while capturing free hydrocarbons make Stormceptor an ideal choice for spill containment, and since hydrocarbons are trapped in a secondary containment system, the cost of clean-up is minimized.

Cutting Costs and Protecting the Environment

Residents across Texas are keenly aware of environmental issues surrounding transportation projects. In regions such as the Edwards Aquifer, drinking water quality is on the line. In other areas, ecological integrity, quality of life and water-based tourist economies are crucial to any development decisions. And more and more, economic issues are at the forefront of infrastructure projects as well.

The challenge? To protect the environment while keeping the costs of infrastructure projects in check. With Stormceptor, Texans can rest assured that spills and urban runoff are being controlled – and thanks to the design features of the Stormwater Treatment System, costs are also being kept in check.

