

Watertight Joint Seal System for Concrete Structures

Project Case Study: Exeter Commons Regional Shopping Center

Problem: Replacement of 96 inch Corrugated Metal Pipe Stormwater Detention System that was not watertight; water leaks causing sinkholes at a retail center. Sinkholes disrupted the operation of the retail center; posed hazards to the public; and impaired the reputation of the facility.

Solution: Installation of the TERRE BOX™ with the Watertight Joint Seal for Concrete Structures. Detaining 2,300,000 gallons within a watertight structure removed the major cause of the sinkholes.



- "Terre Box™ is a precast concrete box that utilizes a patented watertight joint seal system that has been certified to 20 psi hydrostatic pressure. The watertight joint seal system combines post-tensioning with pressure injection of grout into the annular joint space to create a watertight monolithic structure.
- Terre Box™ can be designed to solve any site condition. Terre Box™ is HS-20 load rated, without the need for a minimum cover. This load rating can be increased to meet any use requirements.
- Terre Box™ is a precast solution for Brownfields development; limestone or karst subsurface geology or where stormwater runoff must be detained or retained due to insufficient infiltration permeability.
- Terre Box™ is an MTD-BMP used for post-construction stormwater management.