



# Waterway Concrete Culvert Over Protected by ECP Helical Piers



Nashville Area, Tennessee



This project was to design and build a concrete culvert over an environmentally protected waterway that cut through a golf course. The golfers needed to cross to get to other greens but the waterway made crossing difficult, and the traffic was damaging the waterway.

GroundUp Foundation Repair was contacted to solve the problem. They enlisted the assistance of culvert engineering along with a preliminary design analysis from the ECP Engineering Department. The plan used ECP Torque Anchors and Helical Screw Piles for support of the concrete culvert and ECP Torque Anchors Tieback Anchors for lateral support to the foundation.



The project was extremely successful for GroundUp Foundation Repair. The new concrete culvert allows water to flow freely in the protective waterway while allowing the golfers easy access to the greens without any damage to the sensitive waterway.



- ### Products Installed
- 56 - 4-1/2" diameter piles with 10-12-14 inch helical plate configuration
  - 56 - TAB-450-T, 4-1/2" tension pile caps
  - 106 - 1-1/2" solid square steel shaft with 3 12" diameter helical plates
  - 106 - 1-1/2" solid square steel shaft with 3 12" diameter helical plates

