



### Market

Transportation

# Challenge

A culvert under a highway was experiencing joint separation and the severely offset joints were causing soil erosion. This soil erosion and infiltration were expected to damage the pavement above by creating voids and forming sinkholes. The culvert was 66" in diameter and its invert had collected debris.

## **Engineered Solution**

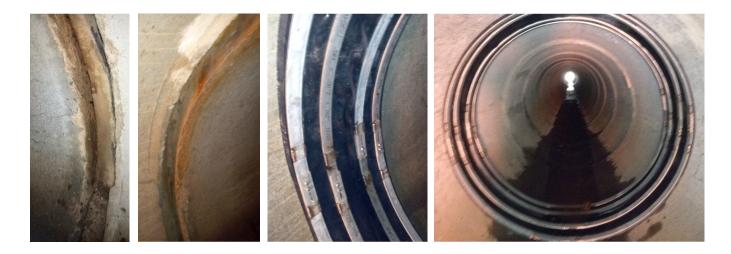
The double-wide HydraTite Internal Joint Seals with stainless steel backing plates were selected to rehabilitate the culvert's joint. Additional bands were installed over the backing plate to ensure the pipe transition had a watertight seal. This solution eliminated infiltration through the pipe joints to prevent further voids and possible sinkholes.

### Scope

Three seals were installed in two days. HydraTech worked with the highway maintenance crew to clean debris from the culvert joints. Concrete patching was used to ensure that the backing plates were seated in place. The repairs were completed despite water still present.

### Solution

Repairs were completed with minimal effects on traffic. HydraTech supplied a solution that did not require excavation, lining, or replacement, which in turn saved the project owner time and money. The HydraTite seal will ensure that the joints prevent infiltration and safeguard the traveling public for 50 plus years.



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