

CASE STUDY

# Three Rivers Park District

## Road Stabilization Project Using NZ 19 – Bloomington, MN

### Problem

The road in the Intercity Regional Trail was deteriorating in two locations and was also showing signs of erosion. The design called for a permanent steel sheet pile wall with a concrete cap. The project consisted of two walls. Wall #1 measured 440 linear wall feet and required sheets ranging from 15'–25' long. Wall #2 was 230 linear feet with sheets ranging from 15'–25' long. When Kraemer North America submitted the bid, they planned on using PZ 22 sheets. Once the contract was awarded, they contracted Engineering Partners, a structural engineering firm. After reviewing the plans, Engineering Partners determined that the PZ 22 would not meet the minimum strength criteria and recommended increasing the required strength by 85%.

### Solution

Kraemer North America informed Skyline Steel of their situation and we proposed the use of NZ 19 to both Kraemer and Engineering Partners. Skyline Steel Armored had just placed the first NZ 19 sheets into stock and had already paired them. The NZ 19s were 94% stronger and 236% stiffer than the PZ 22s, but only 9% heavier. They were also 25% wider, which reduced the amount of piling the contractor has to drive. Once the proposal for the NZ sheets had been accepted, we informed Skyline Steel Armored and they were able to have all the sheets cut and ready to ship in a timely manner. The first NZ 19 sheets were driven at 7:45 AM on Wednesday, April 29th, 2015. The second wall has been completed and the client is extremely pleased with the results.



### Project Partners

**Contractor:** Kraemer North America – Burnsville, MN

**Engineer:** Engineering Partners International, LLC – Richfield, MN

### Products

180 Tons (approximately) of NZ 19