

Repair Road Slips at Raccoon Creek State Park

John Jaskolka, P.E.

Western Pennsylvania is well known for landslides and hill slips throughout the region and along its roadways. Many roadways and steep slopes in this region experience landslides and hill slips due to the underlying soil/rock interface. Heavy rainfall, rising groundwater, and hydrostatic pressure on the slopes lead to dangerous conditions which leads to these road slips. Raccoon Creek State Park is no exception and in early 2019 there were four roadway locations within the park that had slipped. The worst slip was located at Beach Road which required a soldier pile wall to stabilize the roadway and hillside. Soldier pile walls are a common retaining wall strategy in which H-shaped steel beams (piles) are drilled deep into the earth at regular intervals. Between each vertical pile, horizontal precast concrete panels (lagging)

fill



Hill slip along Beach Road.



Soldier Pile Wall Construction Completed

the gap. The four slip areas in the park have been recently repaired and the roads are back in full service.

Raccoon Creek State Park is located in Beaver County along the western edge of Pennsylvania about 30 miles west of

Pittsburgh, PA. The park began as a Recreational Demonstration Area operated by the National Park Service in the 1930s during the Civilian Conservation Corps (CCC) era. The park encompasses 7,572 acres and features the beautiful 100-acre Raccoon Lake.

Project:	Repair Road Slips
Project Coordinator:	Daniel A. Kauffman, P.E.
Project Designer:	Stahl Shaeffer Engineering, LLC
Construction Manager:	Daniel A. Kauffman, P.E.
Construction Inspector:	Tom Porch —TW Consultants, Inc.
General Contractor:	Penn Mechanical Group, Inc.
Construction Cost	\$3,875,000.00